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Editorial



As 1997 ticks round to 1998, we thought it was time we took a look forward to the future, and also back to the past. Now it's only two years till the millenium, don't you think it's time you got your Amiga into shape and brought it bang up to date? We do, and that's why we've put together this Workbench 2000 feature – everything you need to transform your Amiga into the most user-friendly and powerful system on the planet (complete with all the software on the CD!).

Looking back, we take in the events of the last year and even get out those rose-tinted specs for a quick glance at the way we were five years ago. This month we also bid farewell to Mat Bettinson, CU Amiga's technical guru who has been lured off to pastures that are presumably greener. He doesn't get away that easily though and will still be contributing to CU Amiga on a monthly basis. So, all that remains is for me to wish you a merry Christmas and a very happy new year.

Tony Horgan, Editor

Cover feature

36 Workbench 2000

There's no need to wait around for Workbench 3.5 – we've got everything you need here to transform your Workbench into the most powerful operating environment you've ever seen. If you've got the CD edition you'll even find all the software on the disc. Either way this is the ultimate guide to customising your Workbench, from icon enhancements to system hacks, labour-saving add-ons to cosmetic overhauls. Your Workbench will be more attractive, easier to use, more powerful and frankly just more impressive than it's ever been before.



Feature

22 1997 Again...

What a year that was! As 1997 drifts into that cosy place we call history, we take a look back at the most eventful 12 months the Amiga has seen for a long time. We're still here, you're still here, and now the Amiga's back on track with Gateway 2000 the scene seems to be all the stronger for it. To get things into perspective we also look further back and recall what was going on five years ago. Those memories will come flooding back.



Feature

30 Remixing With The Pros

Pick up some tips from those masters of the tracker, Dex & Jonsesey. We talk exclusively to the remix team's Andy McEniry to find out how they manage to consistently hit the top spot of the club charts with the most basic Amiga gear, along with a step by step guide to how they put together their latest club remix, Usura's 'Open Your Mind'.



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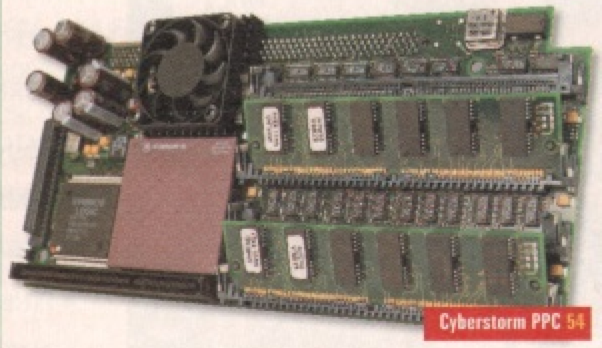
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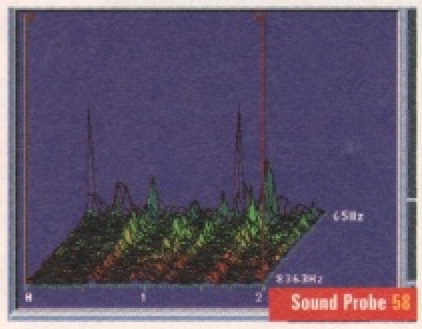
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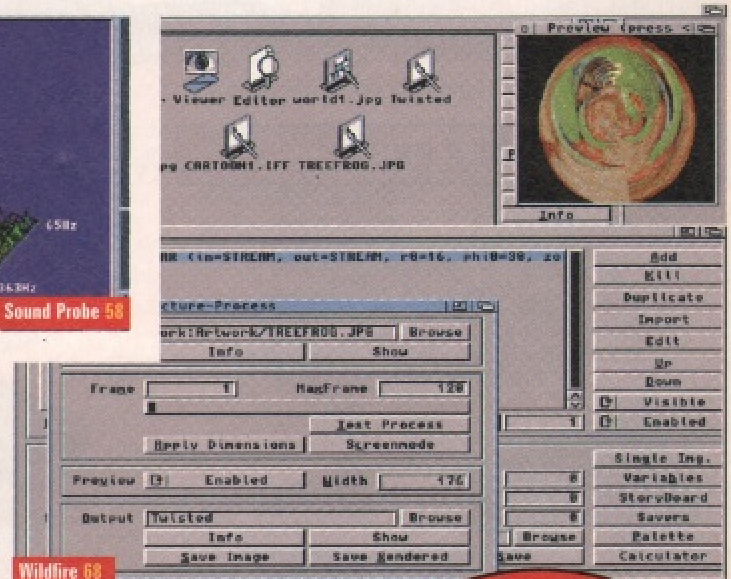
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21 Trapped 3

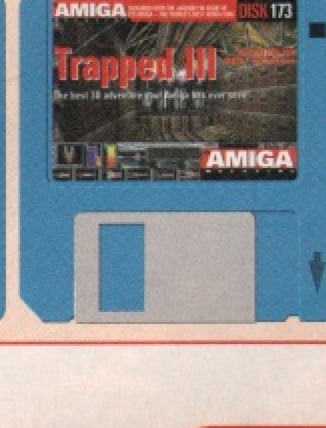
The most technically advanced 3D game ever is here totally exclusively in a playable demo.

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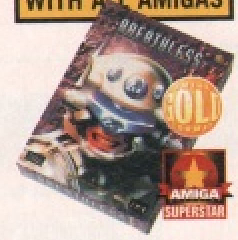
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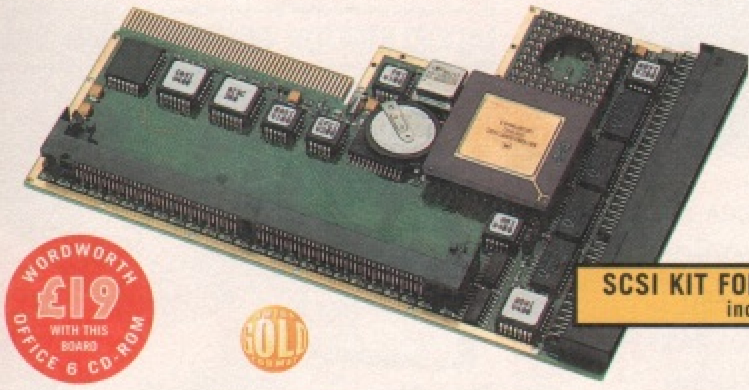
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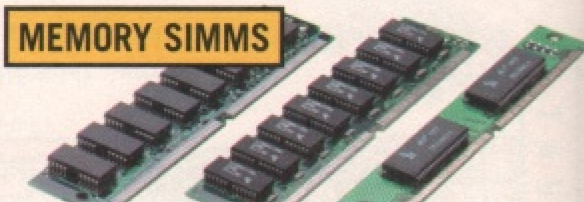
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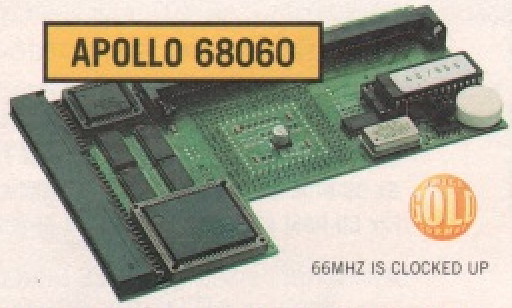
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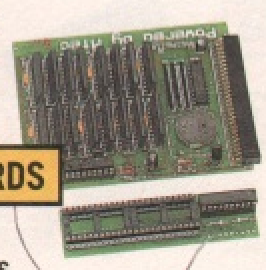
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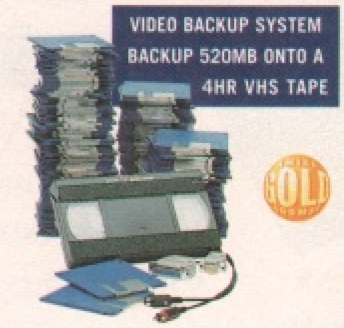
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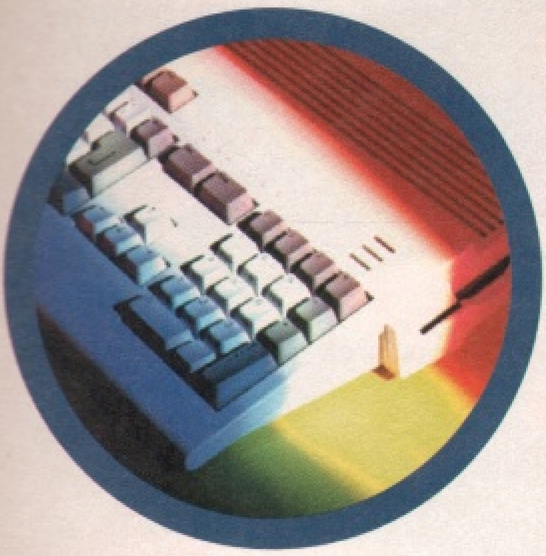
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News

Computer '97 Special

The Computer '97 show held in Cologne over the 14-16th of November was being touted as the most important event for the Amiga in ages, and the promises weren't empty.

At this interesting and challenging time in the history of the Amiga, people visited the show from around the world to see what shape the future of the Amiga would take. Computer '97 is an all formats computer show, but there was no doubt that the predominant platform was the Amiga.

Tens of thousands of visitors crammed into the large halls in the Kö in Messe, the German Exhibition Grounds. The show was a buyer's dreams, with countless software and hardware bargains, including '040 accelerator cards for under a hundred pounds and (small!) hard drives for as little as four. The real pull, however, were the new products displayed. These included some of the most significant developments the Amiga has seen in years.

There were a series of seminars held throughout the three days of the show, enlightening members of the public on a number of interesting topics such as Haage & Partner's Java Virtual Machine, Merapi, and Dr. Greg Perry's Directory Opus. The talk everyone wanted in on was the Developer's Conference, held on the Saturday night. Unlike previous developer's conferences, this one was used as an opportunity to let the industry take a look at the people who now run the company and see what they are doing.

The Boing is back

The Stand attracting most of the attention was, unsurprisingly, the Amiga stand. A large hospitality room situated right in the centre of the hall was surrounded by stalls on which a number of companies had been invited to show there wares. At the front desk various members of the Amiga, Inc. team stood around in their red and white boing ball T-shirts assuring everyone that the Amiga was back for good and handing out stickers. The new senior hardware engineer Joe Torre spent a lot of time demonstrating his Amazing Floating Boing ball trick to anyone who cared to watch.

Perhaps the development garnering the most attention on the Amiga stand was the new Amiga compatible, the A5000. This computer is being developed by DCE in Germany, in co-operation with the U.K.'s Power Computing. It consists of a motherboard which is 100% Amiga compatible, and is baby AT size, designed to fit into a standard PC size tower case. The model on display ran a 68030 at 50MHz, but the final production model may have an uprated





Tomorrow's Amiga

The Power Computing/ DCE A5000 is an Amiga that looks like a PC. Designed to be a compromise between A4000 and A1200, it features a scan doubler for use with cheap PC monitors, optional modulator, 4 Zorro 2 slots, dual IDE interfaces, a bus slot for accelerators and an MPeg Module, a spiffing ATX case and a 68030 processor, with a 68060 version to come. Left, Tom Ianiri of Power Computing shows it off to hordes of impressed onlookers.



processor. There is also a 68060 version expected to come shortly. The beauty of the design is that it will be possible to sell cheap OEM Amigas built into towers with the specification the customer wants, standard PC parts being added as required.

The three Amigas

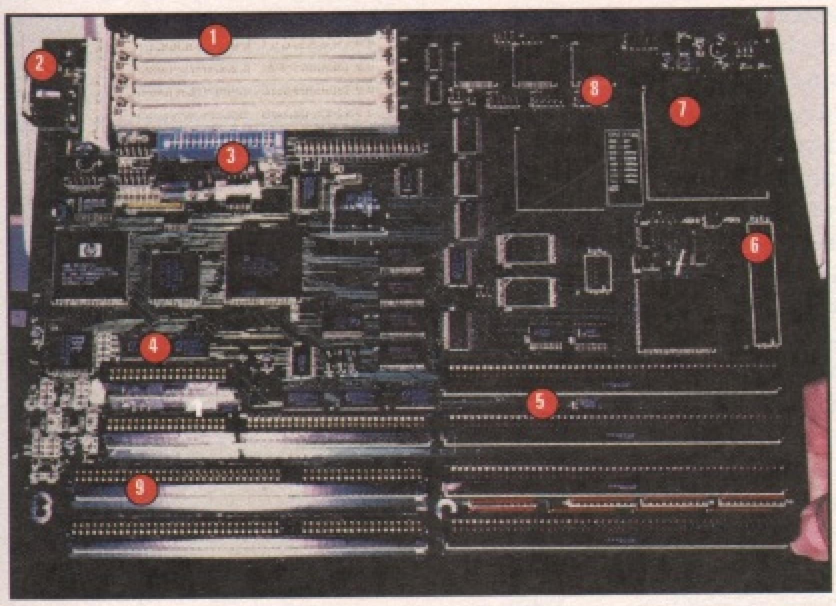
Just to prove that when you have to wait for ages three always come at once, Index Information were also on the stand, showing two entirely new Amiga compatible computers of their own. The first was the impressive Access, the Amiga on a 5.25" card which is sold as a multimedia display solution for point of sale and information kiosk implementations, the second was the BoXeR, another baby AT card designed an OEM Amiga Clone board. The first run board, straight from the factory, arrived in Cologne on the Saturday and received more attention than is entirely healthy for a piece of printed circuit board.

Designed as an A4000 compatible high end solution, it is hoped that it will be priced between the A1200 and the A4000, but will provide excellent expansion options and performance significantly better than an A4000.

Tomorrow's Amiga

Here's a look at the BoXeR from Index Information and Blittersoft. This cunning motherboard carries a wealth of features including :

1. 4 SIMM slots capable of accepting up to 2Gb of RAM
2. Autosensing PC/Amiga keyboard interface.
3. Floppy drive, buffered IDE, parallel serial and mouse/joystick ports.
4. AV slot with RGB, composite and sterio audio out.
5. 4 full Zorro II/III slots.
6. Multiprocessor interface slot for future expansion. First planned add-on is a "very cheap" PowerPC card.
7. CPU slot for any 68040 or 68060 chip.
8. Clock jumpers for selecting the speed of the CPU from 25-75MHz.
9. Active ISA slots for cheap modem, ethernet, sound cards etc.



Amiga PCI!

Micronik occupied another corner of their stand with a selection of their new tower systems. Amongst the towers on display was one called the A1500 PCI.

In the past Micronik have shipped Zorro boards with a couple of PCI slots which allow their rather expensive PC motherboard to be connected in the same case. Perhaps people assumed that this was what Micronik meant, because this particular exhibit did not seem to get the attention it deserved.

A look into the innards of this innocuous tower revealed the truth; the display on the screen was being generated via an off the shelf industry standard S3 PCI graphics card of the kind PC vendors sell for around £30. Micronik say that this model should be ready to ship in a few months, the price to the end user being around 1750DM or £699.

Micronik told us that they will provide support for anyone wanting to provide driver software for any cards. If someone were to write CybergraphX / CyberGL for Riva 128, Voodoo 3dfx or Matrox Millennium based cards, these state of the art graphics cards could be used with an Amiga.

Similarly we could hope to see AHI drivers for the legendary Soundlabs sound cards, not to mention any number of cheap internal modems, communications cards, interface cards and the like. Other developments from Micronik include a scandoubler designed to allow users to connect a standard PC monitor to their towers, which is expected to cost in the region of 150DM, £60.

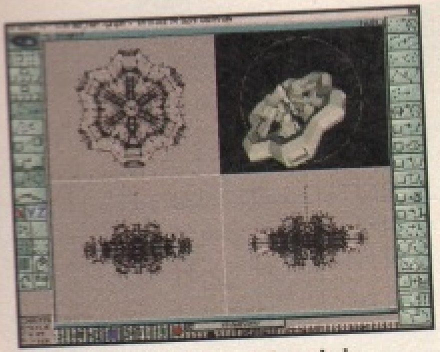
Elsewhere on the stand were HiQ, wowing people with their Siamese Retarg system, with fast Amiga screens displayed in a window on a Windows 95 screen. Showing the ideal solution for Siamese systems were Eyetech, who's EZ tower is designed to take a PC motherboard and an Amiga motherboard in the same case.

A single slot Zorro with a graphics card was used. To solve the problem of the missing video connector which the A4000 uses to pass video data to a graphics card so that it can pass native video signals to a monitor as well as its own display, Eyetech had an automatic monitor switcher for owners of multisynch monitors.

Hot software

The range of software on show was impressive, too. Haage & Partner had Art Effect 2.5 running in all its 24 bit splendour with a pressure sensitive graphics pad, and were showing off the impressive looking Tornado 3D.

Holger Krüse was showing off the new features of Miami 3.0. Scala were there with their market leading multimedia authoring software, and software packages such as Netconnect could also be seen strutting their stuff.



▲ Haage & Partner's new 3D rendering package: the very nice looking Tornado 3D.

Light My Fire

Second only to the Amiga stand in the interest it attracted was the phase 5 stand next door. A large booth plastered with "Light My Fire" posters advertising the PowerUp PowerPC cards boasted a sizeable video screen showing regular presentations of the PowerUp cards and a number of PowerPC equipped Amigas showing off what PowerPC could do. Several new applications running in PowerPC were being shown off, including Wildfire and Elastic Dreams PPC, a realtime morphing package similar to the famous PowerGoo for the PC and Mac.

The A1200 PowerUp card was on show, although some finalising has still to be done. Fitted with two Simm slots, SCSI 2, a 603e and a 68060 processor, it's quite a crowded board, but phase 5 nevertheless found space on it to fit a feature connector on it for an A1200 version of the CybervisionPPC graphics card.

Although the graphics card itself was not on show, some idea of what could be expected could be seen on a Macintosh running a game on a PCI version of the card. The output was nothing short of superb, a fast, high resolution 3D display that updated very smoothly and quickly while rendering complex textures and gouraud shading the polygons in real time. This offers important benefits to 3D rendering, as it will allow real-time rendered preview windows in rendering software, one of the new Lightwave features that Newtek has so far been unable to implement in an Amiga version. Equally exciting is the potential for 3D gaming that the board provides.

PowerUP A1200

Although the A1200 PPC card will initially be shipping with a 68060, phase 5 are looking at several possi-

Dev Con

Amiga Inc has, with the ICOA (Independent Council of Open Amiga), been running a series of developers conferences. They have been held on several occasions at Amiga shows, mostly in America, and have been occasions for developers to get together and discuss what was required for the future of the Amiga. AI have been dipping into this resource to find out what the guys who work with the computer every day think, and to help them plan their strategies for the future.

This one was always going to be a little different. Prior to the show, the rumour had been circulating that there was going to be a big announcement, widely presumed to be a commitment to a particular CPU for the future. Hundreds of people from the Amiga industry flooded into the large Seminar rooms to hear what was to be announced.

Petro Tyschtschenko opened with a run down of the licensing arrangements they had made, and mentioned that he hoped a deal with REC, who make the Chinese WonderTV Amiga system, would be struck soon. He talked about new hardware coming from Index, DCE and Quickpack, as well as license deals with Intrinsic, ELBox of Poland and ProSupport of South Africa.



Schindler's list – bad joke

Next on the stage was Jeff Schindler, the President of Amiga Inc., in South Dakota. He started by thanking Petro Tyschtschenko for all his work, which raised a huge cheer. A lot of people were dubious about Petro T. after the Escom collapse, but his hard work during the legal proceedings and in getting Amiga International back on its feet since are clear to all, and have been to a large part responsible for the Amiga still being here today.



▲ Amiga Inc's Joe Torre shows off his coke bottle collection under Darrick Lisle's steely gaze.

Jeff Schindler went on to introduce himself, an enthusiast whose first machine was a Commodore Vic20. "I started programming right away, and in about 4 hours... " he said, "I ran out of memory."

The hoped for Big Announcement never came, but telling statements were made about the future course of the Amiga. It was stated that the platform would be "...at or above" the industry standard for technology, and that the main job was to bring together all the best third party developments while defining a clear set of open standards. The idea is that products with the Boing Ball mark will be fit the standard, that you can be sure that any to Boing Ball marked products will be compatible, whoever makes them.

Nothing definite about future hardware choices were made, but the results of their surveys up to date were shown, and these give a strong indicator of what is likely. Support for the PowerPC as CPU of choice was unambiguous, but even more so was the idea that the Amiga OS should in future exist on more than one CPU. Strong emphasis was also put on extension of the Amiga's graphics, communication and multimedia capabilities.

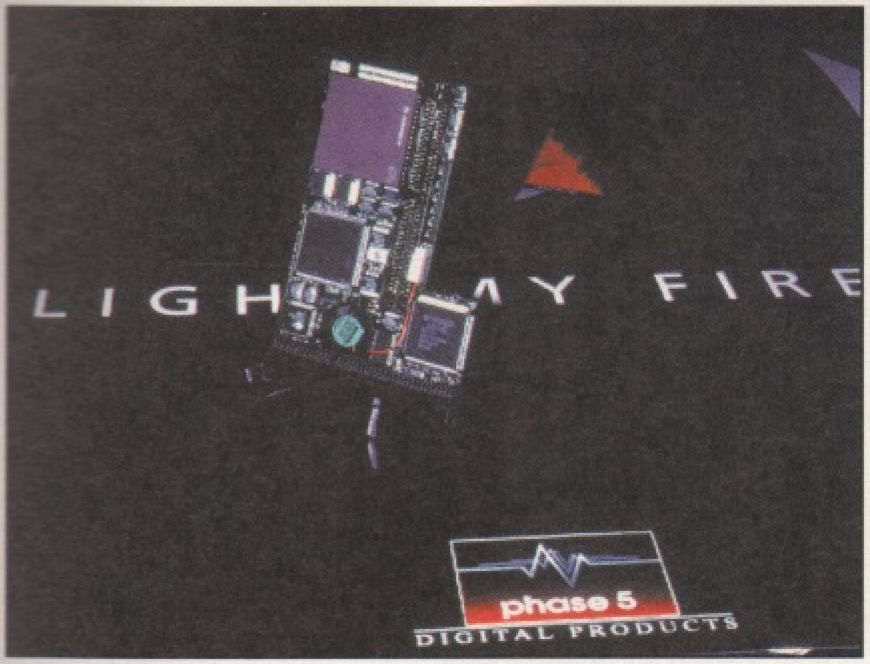
Development roadmap

Jeff Schindler went on to talk about their plans for the immediate future, including a 3 year roadmap of development. The first job is to recruit a team, which will be done by searching for the top talent world wide.

Already a number of the big names of the Amiga's history have pledged their support as advisers, including Andy Finkel, R.J. Mical, Dale Luck and Carl Sassenrath. Following that will come OS upgrades and new releases, along with leveraging of AI's and Gateway's clout when dealing with other companies.

They have an approved budget until the year 2000 which will allow them to negotiate seriously with large firms for Amiga support, and, to help soften the concern many have about the failure of previous owners to market the machine, AI told us that their budget includes millions of dollars for advertising over the next three years.

Rolling investigation into internet support, GUI systems, bug fixes, driver support and so on will feed into OS support, initially with a release of a software only upgrade, OS3.5, but with more radical improvements to follow. The importance of upgrading the chipset was stressed, as was getting a new OS for the upgrade from AGA. All this, we were told, would lead to a major new release by the end of 1998. Petro Tyschtschenko summed it up best when he told the audience "I hope you will be here next year to see our new hardware..."



▲ PowerUP for the masses – phase 5 showed us their A1200 PowerPC card, and here it is!

ble sources of very cheap 68040s, and a 68030 version of the card will be released in a few months.

Speaking to us about the future of PowerUp, phase 5 talked about the importance of the multiprocessor capabilities of the PowerUp system. The current range of cards multiprocess between the 680x0 and PPC603e/604 chip, but in the future expect to see cards with several PPC chips multiprocessing.

Adding a card with multiple 604 processors to an A4000 would turn it into a rendering engine of awesome power, at a price similar specification machines would find it hard to match. With the news that Newtek have taken a real interest in these developments and have announced they will continue to support the Amiga, it looks like there is at least one niche the Amiga is assured a bright future in.

Of course the PowerUp project is only the first step in Phase5's plans. Although nothing was on show, Phase5 were reminding everyone of their own Amiga based wonder computer, the A\box. Based around an advanced multimedia processor named after the national drink of Brazil, the Caipirinha, the A\box is intended to be the next generation of multimedia computing, and to prove it phase5 had a bar hidden inside their stand where they prepared Caipirinha cocktails, and very nice they are too.


▲ Haage and Partner – they get their logo in the mag 'cos they bought us dinner.

Tower fever

The big hardware of the moment judging by what was on display is the tower conversion. Micronik had their own stand as well as their presence on the Amiga stand, where they did a brisk business with their tower kits, built systems and big range of tower accessories.

RBM showed off their Towerhawk towers, as well as their Zorro boards and accessories, many of which go to make up the Eyetech EZ tower. Eagle Computers GMBH had a wide range of tower cases on display, including some of their own A400Ts, while Apollo hosted the e\box tower conversion from Polish company ELBox computer. The e\box looks very nice and seemed to contain a lot of clever solutions, and we hope to look at one soon.

There was little new to be seen on the 680x0 series accelerator front, with the attention the PowerPC is currently garnering making it hard for people to produce anything with the older technology likely to attract too much attention.

The only obvious development on this front is the price. Although the basic cost of the chips acts as a drag factor on price reductions, this lower end technology has been plummeting in price of late and has been going for silly prices.

One stand was selling low en 68040 cards for under ú100, and as rumours abounded at the show of suppliers with large stashes of old stocks being sold absurdly cheaply, we may well see that kind of price becoming standard soon.

Other hardware developments were thin on the ground. Notable developments were from individual computers, whose Mark2 Catweazle controller has developed the impressive ability to read old style variable speed Mac disks on a normal floppy drive, and Village Tronic, who were showing off some of their long promised add on cards for the Picasso IV. The Pablo and Paloma video cards were joined by the concerto 16 bit sound card.

More hot software

The most talked about software package making its debut at the Cologne show was Amiga Forever, from Cloanto. This is actually a piece of software for the PC, not the Amiga. It consists of an Amiga emulator, a licensed OS3.1 ROM and networking software which allows you two treat the emulated system as a separate, networked solution. The demands of emulating the Amiga's custom chips is a huge drag on the PC, limited the package to OCS emulation, not AGA. The solution lies in an implementation of Picasso96 software which treats the PCs own display as a Picasso96 screenmode, giving quite an acceptable virtual Amiga.

Haage & Partner were there with a large stand showing off their own developments as well as various packages they have distributorship of. Notable packages on show were Tornado3D, an Italian 3D rendering package which looked extremely good, reminiscent of an attempt mix the best parts of Imagine and Lightwave, and Art Effect, the photoshop like 24bit graphics package which has reached version 2.5.

Haage & Partner were also busy promoting version 3.0 of their excellent StormC compiler, WarpOS, which they claim allows significant performance enhancements for PowerPC coding, and X-DVE and FontMachine from Italian software house Class X developments.

IrseeSoft had the latest versions of Turboprint and Picture Manager Pro, versions 6 and 5 respectively. Currently German only, but expect English versions very soon.

Turboprint has spawned text handling features for the Graphics Publisher and a photo correction system, while PMProwas showing a whole host of new features.

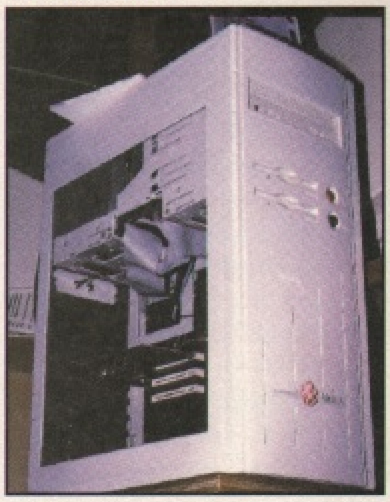
This show will be looked back on as a landmark for the Amiga. The business, and the amount of selling done, will have no doubt been a great encouragement to many dealers. A few visitors, on the other hand, voiced concern that there was not enough happening. Certainly the rumoured an much hoped for Big Announcement didn't happen, but one thing Amiga International / Inc. made clear is that they are serious.

It was a show in which a lot of impressive and important developments were there to see and touch, but the full ramifications of the show have yet to be seen. A lot went on behind closed doors and in hospitality suites, and a lot of hints were dropped. One thing this show made very clear is that if the Amiga is dead, it's the liveliest corpse you're likely to see. ■

Andrew Korn

Tomorrow's Amiga

Take a peek into the innards of this Micronik A1500 and you will see the future. Those little white sockets are PCI slots and the card inside is a standard PCI graphics card, here being used to output the Amiga's display. This machine has a PowerPC CPU and PCI slots - what more do you need?



Tommorrow's Amiga

phase 5 were showing of the famous Caipirinha, but unfortunately only in the form of the cocktail, not the chip behind the A\Box.

1. Several ice cubes, crushed.
2. 3 limes, cubed and crushed to release the juice.
3. Pinga, a Brazilian rum.
4. Brown sugar.
5. Straw. Use this to stir first!



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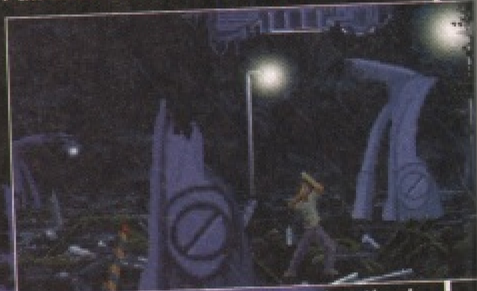
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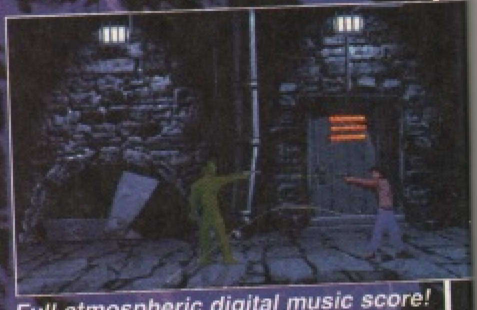
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- Incredible, atmospheric digital music score!
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- 100% pure assembly language
- Thousands of hand-drawn animation frames!
- Can be used on Double-scanned screens.
- Complex animations are custom-rendered!
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- Full use of AGA chipset - using 256 colours.
- Rippling water, sweeping light beams etc.
- Amazing film-quality cut-scenes!


Full atmospheric digital music score!

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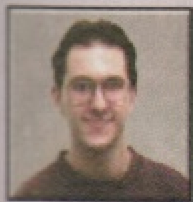
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Stateside News

by Jason Compton: Editor in Chief of Amiga Report Magazine

Ohio Fallout

November was ushered in with the latest installment of the Midwest Amiga Expo (MAE), held by Columbus Ohio user group Amicon.

Quite a lot of activity and life packed into a show bigger than its predecessor twelve months ago. Although Newtek did not appear as they were once expected to (more about them later), there was plenty of activity to keep the visitors busy.



Perhaps because of the drought in Amiga shows over the past several months in North America, the developers who came were pushing to be noticed. Nova Design continued their push of the new Aladdin 4D and ImageFX, although at the time there was no discussion of the impending 3.0 update for the latter. If you were looking for Internet connectivity, representatives for AEMail as well as for the new Finale Development net utilities were onhand, and Gamasoft held a talk session to tell you how to put it all to work. Asimware showed off their latest version of MasterISO, which by all appearances should make creating and copying CD-ROMs easier than ever. While not present, Newtek's products were not totally unrepresented – TUGALUG, a Toaster/Flyer user group – had demonstrations running over the course of the weekend, and Prowave was ready to sell you a variety of tutorial tapes for Lightwave.

In a revival that I hope we see more of, a full version of Kidstop, an educational package that succeeds in being entertaining without being pedantic, was on offer.

While the display unit had a touchscreen, Kidstop can be driven with the mouse (which more and more children are learning to use at early ages). And while making the trek overseas was unfortunately too much to ask for the European developers, particularly with Computer '97 looming just two weeks away, some relatively new products poked their heads out at the MAE courtesy of some enterprising retailers.

Wonder Computers brought a hefty supply of the new Delfina Lite DSP sound board, and the new 16-bit sound daughtercard for the Picasso IV did make an appearance as well.

Ohio players

Of course, Eric Schwartz, an Ohio resident, made it to the show and delighted audiences with his legendary animations, put up on 20 inch monitors.

The convention hall was rounded out by a variety of other exhibitors, ranging from sysops with everything from soup to nuts for sale to full-time retailers. And then, of course, they had to let the people in. It did get somewhat cramped at times, and a patron on a Rascal nearly bowled several people over on numerous occasions as he tore through the proceedings, but no fist-fights erupted.



Petro performed his duty as head of state and gave the opening address for the show, in which he gave out suitable amounts of flattery and thanks to the crowd, invited everyone to come to Germany for Computer '97, and shared the information about the DCE line of Amiga clone computers being developed under license.

It was the first many had heard of the machines, and of course Petro was rewarded with applause. He was fairly straight with everyone early on in making it clear that he was not going to deliver any earth-shattering information.

On Saturday night, Joe Torre from Amiga, Inc. along with Kermit Woodall of Nova Design and the ICOA's representatives in Fleecy Moss, Dean Brown and Andy Finkel attempted to hold a meeting of developers, which unfortunately broke down rather quickly from its intended purpose. Hopefully, these things will be handled with a little more advance planning, RSVPing, and screening of credentials in future.

Newtek Bawl-out

In the November issue, I mentioned that every week a rumour starts that Newtek is dropping Amiga development. Right on schedule, it happened again, as a result of some poorly chosen words and a lot of fuel thrown on the fire by rash souls. It seems that at the recent Newtek Expo, Newtek's CEO made a remark in a somewhat private setting that the Amiga Flyer development team was currently engaged on another project.

Once this remark was repeated, it quickly blossomed into "Newtek has cancelled its Amiga development" which quickly blossomed into "Newtek has dropped all support for its Amiga products". The public outcry and confusion got so great that finally Newtek's CEO as well as its founder, Tim Jenison, issued statements making it clear that there had been a misunderstanding, that the Flyer team had been reassigned to another project for the time being but that Newtek and the Flyer team had every intention of going back to the Amiga work in due course.

It seems that the talent was needed elsewhere, and a Flyer software update had just been completed, making the programmers available for the time being.

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Power Computing	6-9	01234 851500
Sadeness	14	01263 722169
Selectafont	53	01702 202835
Siren Software	19	0161 796 5279
Special Reserve	53	01279 600770
Weird Science	IFC-3	0116 246 3800
White Knight Technology	87	01920 822321
Wizard Developments	56	0181 303 1800

CD-ROM

Super CD-ROM 18



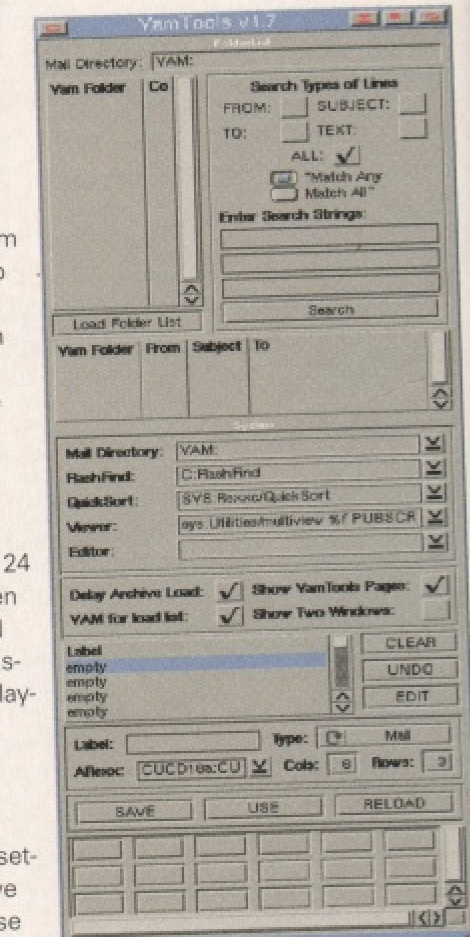
Welcome to CUCD18. This CD is crammed full of programs, games, utilities, mods and a host of other goodies. If you don't yet have a CD drive, this is your reason to buy one. Prices have never been lower and 650Mb of quality software each month is just too good to miss out on.

How much is there?

Personal Paint	1.6Mb	Graphics	25Mb
Foundation	22Mb	Magazine	30Mb
Trapped3	3Mb	Online	50Mb
CDSupport	60Mb	Previews	65Mb
CUCD	508Mb	Programming	10Mb
		Readers	90Mb
CDROM	15Mb	Sound	115Mb
Demos	6Mb	Utilities	50Mb
Games	7Mb	WWW	45Mb

Making the most of CUCD18

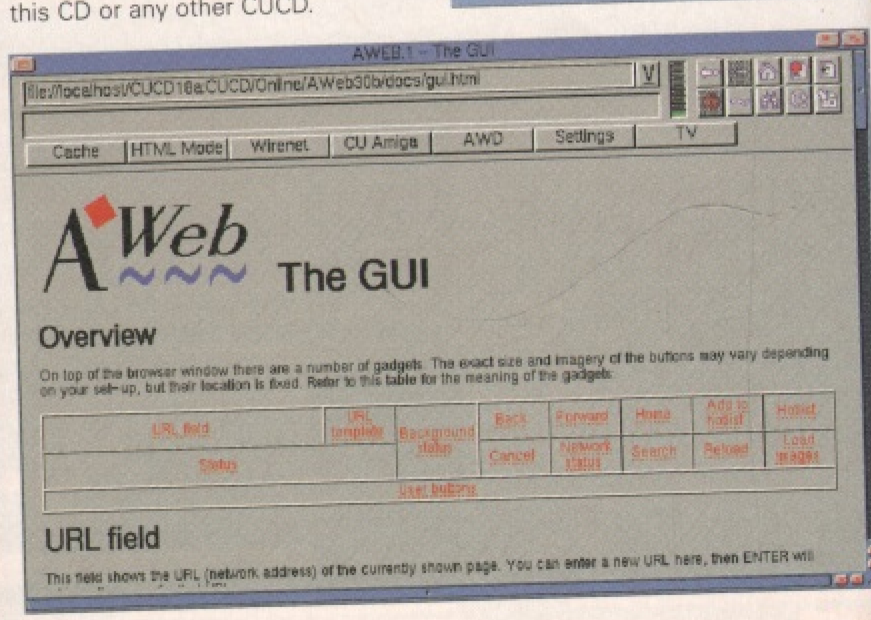
All CUCDs are designed to be used whether you boot from the CD or your normal Workbench. If you boot from the CD, everything is setup and ready to go. If you want to access the CD from your Workbench, you should first run InitCD. This sets up various assigns and paths needed by programs on the CD, so if you don't do it, things won't work. It doesn't make any changes to your system, or write any files to your hard drive, all changes are temporary and can be reversed by running InitCD again.



Your own custom CD

In the past you had to use whatever file viewers we set up on the CD. since these had to work with all Amigas they were quite limited. From CUCD12 we decided to allow you to specify how the CD should work on your Amiga and included CDPrefs in the CDSupport drawer. If you have never run this before you should be asked if you want to when you run InitCD. CDPrefs lets you specify which program you want to use to handle each type of file, graphics card users can view pictures in full 24 bit colour, ProjectXG users can listen to midi files through their midi card and people with sound cards can listen to mods with an AHI module player. It also means we were able to provided different defaults for Workbench 2.x users.

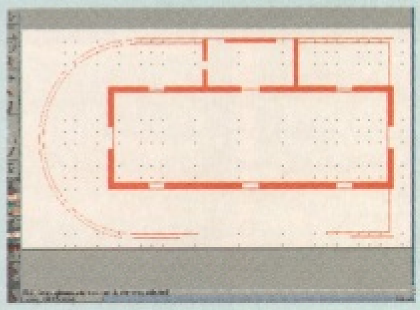
Once you have run CDPrefs, your setting will be saved to your hard drive and will be used every time you use this CD or any other CUCD.

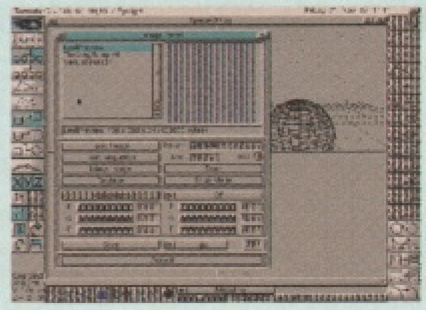


Highlights of CU Amiga CD 18









These are a few highlights of CUCD 18. The more time you spend looking through the CD, the more you will find.

Foundation demo

Try out this brilliant new strategy game for yourself. There's instructions on the CD.

Graphics/Wildfire

A new version of this effects processor that now works with a PPC as well as the standard Amiga CPUs. Wildfire was used to create several demos of extremely high quality that have appeared on previous CDs. with the power of PPC behind it you can expect to see some even better ones soon.

Graphics/MagnifiCAD

A full-featured Computer Aided Design (CAD) program. This is a demo version with a few limitations, but it is still very usable.

Magazine/ Ultimate WB

All the utilities referred to in this month's Ultimate Workbench feature. There is every thing you need to make your own Workbench faster, more efficient, more attractive and, most importantly, your own. If you need inspiration, we have also included a selection of screenshots of different workbench setups in the WBPix drawer.

Online/Eucalyptus

Development continues on this new email client. Using ClassAct it has a very friendly interface.

Online/AWeb

A new version of AWeb 3.0 was released recently. The demo version is included here. In the WWW drawer there is a special CU Amiga version that has all the features of the full, commercial, AWeb, but for local pages only.

Online/News

A selection of last month's posting to the various Amiga newsgroups, plus a full archive of the month's postings to the CU Amiga mailing list. Anyone who posted to the list last month can look back and think "Did I really say that?!!!"

Online/YamTools

Using MUIrexx (as used for CDPrefs) this program adds extra features to the YAM email program.

Previews/Tornado3D

This is a special demo of the new 3D rendering program, tornado3D, complete with a tutorial specifically written for CU Amiga readers.

Previews/Strangers AGA+Uropa2+ FinalOdyssey

Previews of three new games from Vulcan Software

Programming/AmigaE

E is a very popular programming language for the Amiga, with the power of C without the difficulty. It has been a long time since the last update, but here it is at last.

Sound/Samples/ WAVbeats

This is a massive collection of 16 bit samples, in WAV format. They are included for use with the sound articles in this month's magazine, but can be used with any program that supports 16 bit samples, such as SinED.

Sound/SinED

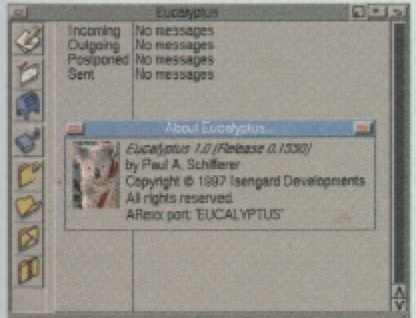
Another powerful sample editor. With this one and SoundProbe in the Magazine drawer, sample fans are having a bumper month with this CD.

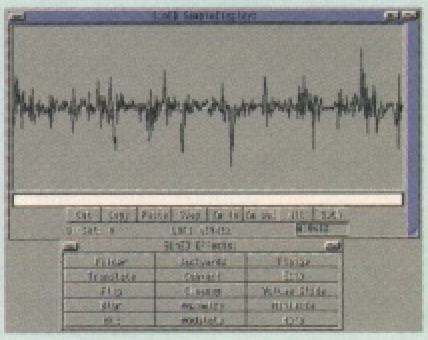
Utilities

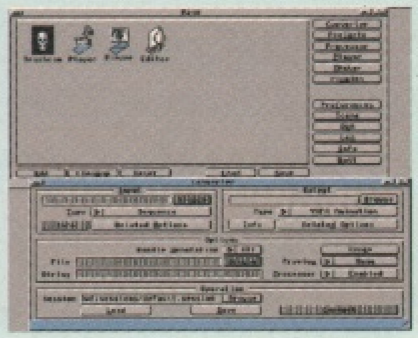
The Utilities drawer contains so many different, and useful, utilities that it wouldn't be fair to select one or two as highlights. There really is something for everyone in here. Make sure you check out the commodities and Blankers drawers, and Directory Opus users can find the latest program updates, and a few other goodies, in their drawer.

WWW

A selection of sites from the World wide Web, including CU Online.

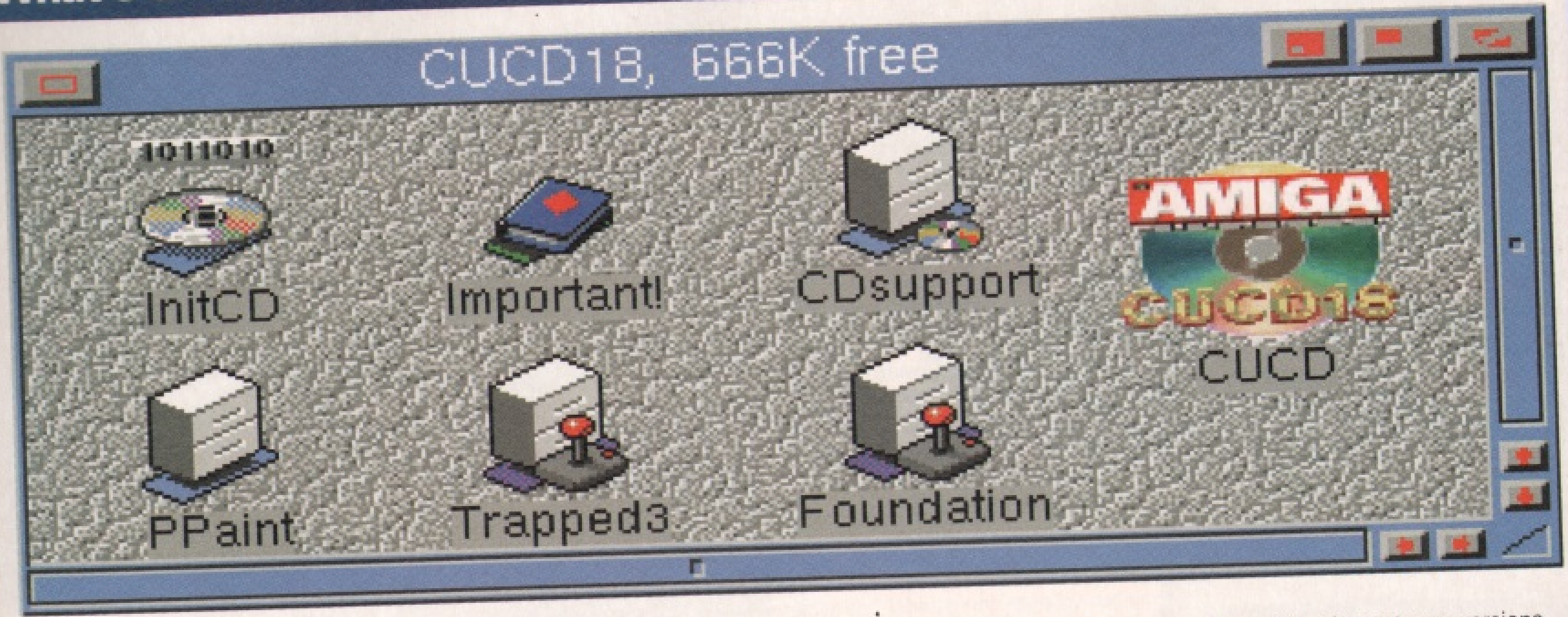








What's on this month's CU Amiga CD?



PPaint: Version 6.6 of Personal Paint, a special created just for CU Amiga. This is a much enhanced version of 6.4, containing many of the features present in the latest version 7.1. But you get this one for free!

Trapped 3: A brand new 3D texture-mapped game. This was rushed here from the Computer 97 Show in Cologne, just in time to go on this month's CUCD, making sure you have it in time for Christmas.

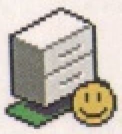
Foundation: CD users get the bonus of another brand new game. This is a special demo of the yet-to-be-released Foundation. It will run on a 2Mb A1200, but really benefits from more RAM and a faster processor. It needs either AGA or CyberGraphX/Picasso96 on a graphics card. Foundation needs to be run from hard drive, just drag the entire Foundation drawer onto your drive. you will need about 22Mb of free space.

CDSupport: This contains various support files, such as mod players, anim players, GMPlay, MUI, ClassAct. Most importantly, this is where the CDPrefs program lives. With this you can customise your CUCD to launch your choice of program for each type of file.

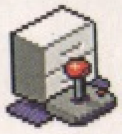
CUCD: The CUCD drawer contains most of the CD contents, here is a selection of some of the contents.



CDROM: An update to AmiCDFS, the recommended CD filesystem for use with CUCDs. Full indexes to all the Aminet CDs, with a useful search tool. An even larger collection of CDIDs, now archived with lha for faster copying to your hard drive and a converter to use these CDIDs with AsimCDFS. Discus is another audio CD player.



Demos: Only three demos this month. all require AGA and a fast processor certainly helps. The demo scene seems to have been a bit quiet this month, but expect some major demos in coming months.



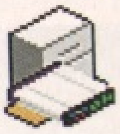
Games: Another selection of joystick breakers, worms levels and cardsets. Also a couple of Star Trek variants and a database on the Star Trek shows and films. There are not as many games in here as normal, but there are several major games elsewhere on the CD, and a few more in the Readers section.



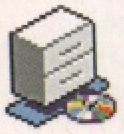
Graphics: This month we have a demo of WildFirePPC and an excellent CAD program, MagnifiCAD. There is a further collection of ARexx scripts for DrawStudio and some very detailed Lightwave objects of the Earth and Moon. There are also a few more icons and backdrops, just in case you didn't get enough last month!



Magazine: This drawer contains all the support files for articles in the magazine. The source code for the C tutorials, demo versions of PicManager, SoundProbe and WebPlug, some AIRlink and PPC extras, and all the utilities for the Ultimate Workbench.



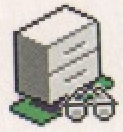
Online: Archives from the last month's postings to the CU Amiga mailing list, together with a selection of news from the Amiga newsgroups. Web page and graphic design tools, a mailing listserv and an IRC bot. Also the latest Aminet index.



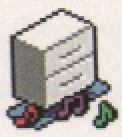
Previews: Special previews of Final Odyssey, StangersAGA and Uropa2. A demo of a new 3D rendering package, Tornado3D. This was especially created for CU Amiga, with an extra tutorial written just for you. There is also a large selection of demos from F1 Licenceware.



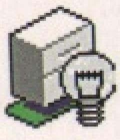
Programming: A new release of Amiga E, the popular programming language for the Amiga. Also on the CD is ARexxGuide, a complete guide to programming in ARexx in AmigaGuide format, ModemLink for making modem linkable games and ClassMate for creating ClassAct GUIs.



Readers: A bumper collection of programs, games, mods, anims and pictures, sent in by CU Amiga readers. Is your work here?



Sound: Most of the Sound drawer is taken up by a huge collection of samples, to go with this month's features. You also get new versions of HippoPlayer, SinED and AHI, the retargetable audio system.



Utilities: A large collection of utilities this month, with over seventy items. This includes the latest updates for Directory Opus Magellan, Workbench enhancements, commodities and screen blankers.



WWW: Demo versions of the big three browsers, with a special version of AWeb. A selection of web sites to view with them, including Football and Astronomy sites, in addition to a selection of Amiga related sites.

Disk doesn't load?

If your CD does not load contact DiskXpress on 01451 810788. If they advise that the CD is faulty send it along with a SAE to: CU Amiga Magazine Disk Returns, DiskXpress, 7 Willow Court, Bourton Industrial Park, Bourton on the water, Gloucestershire GL54 2HQ.

Please note that some of the CDs will not autoboot on systems other than CD32s, so try loading it from Workbench first.

CUCDs will work with almost all Amiga configurations and filesystems. However, we recommend older CD filesystems be replaced where possible. A non-working program is *not* an indication of a faulty CD!

COVER DISKS

Personal Paint 6.6



Welcome to Personal Paint, one of the most powerful and best supported paint and animation packages on the Amiga today. Before you settle in and start creating your own masterworks, there's a few basics you might want to have sorted out first.

Loading instructions

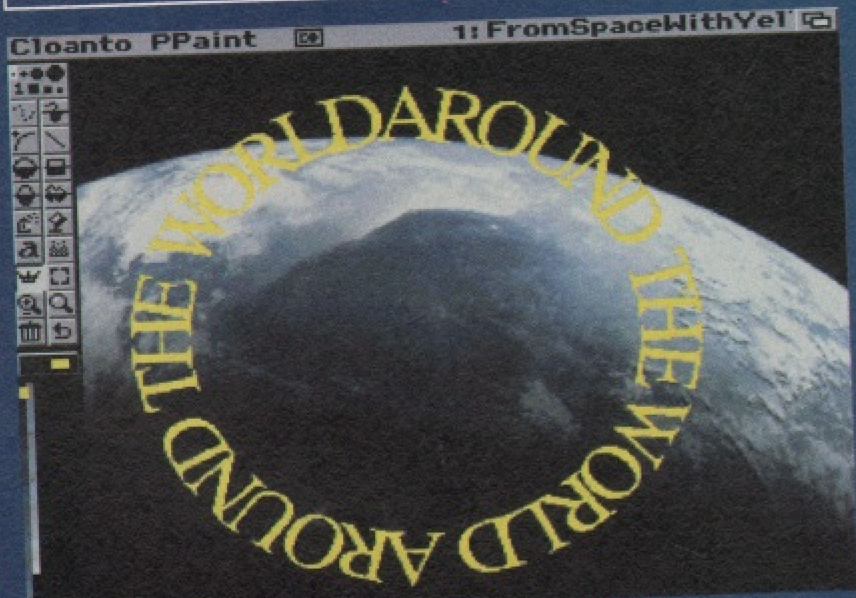
Personal Paint: you can run this straight from disk 172 after booting from your hard drive. To install it to your hard drive, make a drawer called PersonalPaint6.6 on your hard drive and then copy everything from disk 176 into there. For example:

(open a CLI or Shell)

```
cd work:
makedir PersonalPaint6.6
copy df0:#? work:PersonalPaint6.6
```

That assumes that the partition on which you want PPaint installed is called Work:. Change this to your prefered partition if you have named your hard drive differently.

You'll find three pictures on the Trapped III disk to get you started.



▲ Here's a new trick: circular text is just one of the automatic tasks available from the new range of ARexx macros – don't worry, no ARexx knowledge is required though!

If you're comfortable using another Amiga paint program such as Deluxe Paint or Brilliance, you're in good shape as Personal Paint has modeled its interface closely after DPaint, and users of Brilliance should be familiar with the same concepts. PPaint's power in some areas goes far deeper, but first things first.

New since 6.4

PPaint 6.6 offers a number of enhancements over earlier versions. In particular, PPaint now has an ARexx interface to allow for powerful effects, supports more image formats without the need for datatypes, and has built-in "CycleToMenu" and "PopMenu" gadget capabilities.

The interface

Keyboard shortcuts abound for most anything you could do in PPaint, but since you're going to be drawing with the mouse anyway it's best to start out using the icon and menu controls, although one important key to remember is Shift, which restricts your mouse movement to 90 degree angles (strictly horizontal or vertical) – this can come in very handy for lots of things.

On the left side of the screen is your toolbar, which leads down to the palette selection. As well as the toolbar you've also got the Personal Paint menus...

Project From here, you manage the large details – what image to work on, what format to save in, and what screenmode to work in. This is also one of the ways to access PPaint's powerful Image Processing mode.

Brush PPaint's brush handling, to allow the creation and loading of custom drawing implements.

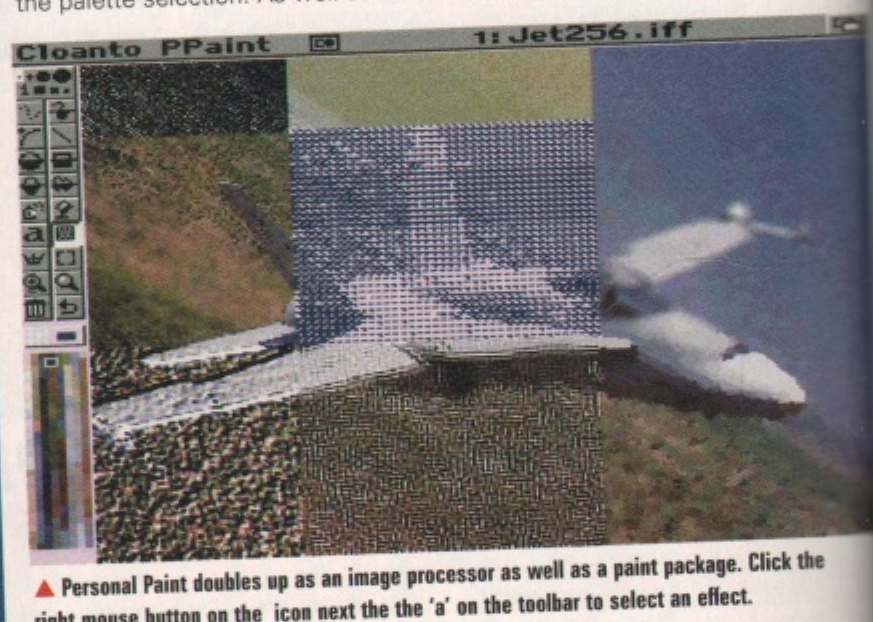
Animation From here, you manage the creation of animations (ANIMs). PPaint also supports anim-brushes, which alter a brush's appearance as frames go by.

Text Special functions for adding text to your pictures.

Color The color menu deals with palette management and reduction, the creation of 'stencils' (which can be used to protect certain areas of your picture while you work on others), and allows you to track colour usage.

Settings All the other preferences you could want are stored in this menu, including virtual memory management.

In the toolbar itself you'll find the pieces you need to actually get some work done. When working in the toolbar, the key thing to remember is that while you select a function with the left mouse button, clicking the right mouse button will usually allow you to access a set-

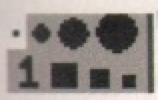


▲ Personal Paint doubles up as an image processor as well as a paint package. Click the right mouse button on the icon next the the 'a' on the toolbar to select an effect.

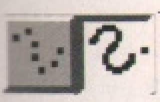


tings menu or custom configure an option.

Along the top two rows are your brush selections. The top four are your standard circular brushes, and the bottom row has a '1' along with three square brushes. The '1' is a special case, but for the other seven, you can simply select and use the brushes with the left button, or right-click to adjust the brush to a customized elliptical or rectangular shape. To shape them, right-click on the brush. Move the pointer to the drawing area (the pointer should have a boxy tail), then hold the right mouse button and move the mouse to get your desired shape.



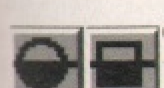
By right-clicking on the '1' you can use one of nine custom brushes you've previously set up in the Brush menu.



These are your general freehand drawing tools. On the left is a 'dotted' line while the right gives you fluid lines. Notice the horizontal line running through this button. It is really two buttons – on the top is the button for straight lines, on the bottom is the button for 'area fill lines', which automatically fills in patterns defined by a line you trace on the screen. You can create some stunning effects just with creative use of this feature. And be sure to try right-clicking on this and all the other buttons to get an idea of the special customizations you can apply to the basic building blocks.

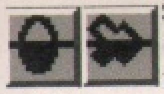


Bezier curves (left) are the standard way to generate complex, recreatable shapes and waves. Or, if you fancy, just draw a straight line with the other tool.

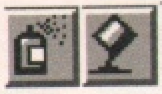


Circle and rectangle tools, respectively. Note the top/bottom distinction again, for open or filled shapes. You can define a gradient or other pattern for the fill with the right mouse-button menu.

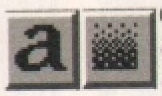




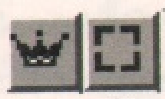
Slightly more complicated shapes here: the ellipse and the freeform polygon. The ellipse tool works like Circle or Square (and you might want to experiment with the Shift key while setting up your ellipse). The polygon allows you to draw successive, connected straight lines. You can exit the mode by closing the polygon, selecting another paint tool, or by hitting space.



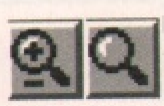
The spraycan and the 'fill can' respectively. The spray gives you an airbrush scatter effect, while the fill can pours paint into a closed region you select with the pointer.



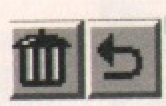
On the left, you can enter PPaint's font engine, to incorporate Amiga bitmap or vector font messages onto your image, be it for credits or for some other purpose. That gradient pattern on the right is another way into PPaint's image processing menu, which gives you the power to apply numerous intriguing effects to your image. This is one of the features that really sets PPaint apart from the crowd. Right-click on the button to get your choices, and get a different 'shape' to apply your effect in by multiple-left clicks on the button.



That crown over there is the international symbol for ARexx, letting you call up interesting external macros for your graphics work. Be sure to check out the Vector Text feature – you can get some excellent text looks without dealing with the cumbersome Amiga font engine. The right-hand button allows you to define a brush.



From here, you control the zoom feature of PPaint, for work in tight spots.



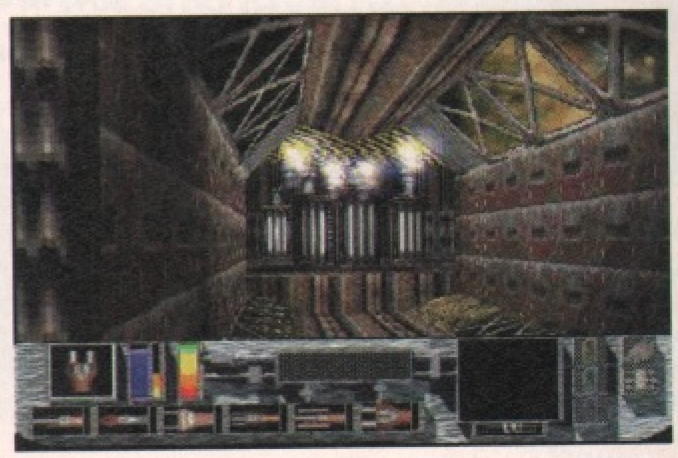
Finally, the tools you hopefully won't use too often. Click on the left to throw away your work and clear the screen. Click on the right to undo a mistake.

Now you're ready to get started with PPaint. Be sure to read the online documentation, and of course once you've completed your masterpieces don't forget to submit your work to CU Amiga for inclusion in our Art Gallery! It's paint, and this time it's personal.

Trapped III



This is one of the best cover disk game demos we've ever had. Trapped III was inspired by the request from fans of Trapped 1 and II to take the wonderful 3D engine and make the gameplay more action orientated. Trapped III has the most technically advanced 3D engine the Amiga has ever seen, with stunning lighting effects and diverse level designs. It makes the likes of the Alien Breed series, Gloom and Breathless look basic in the extreme. You don't necessarily need a high powered Amiga to run Trapped III but it has been written to take advantage of all the horsepower you've got on offer, so better CPUs allow for faster screen updates. You can alter the size of the screen to get it running at a reasonable speed on your set-up. There are four different basic display settings to choose from: ECS, AGA, Graffiti and Picasso96. The basic controls are mouse or cursor keys for movement, ALT to shoot and the number keys select different weapons. The function keys call up various options screens and the H key displays the help mode. To quickly alter the screen set-up, use F1 to cycle through different pixel sizes and + and - to expand or shrink the overall display size.



To install it to your hard drive, drag the "DragMeToHD" icon to where you want it installed and then double click that icon.

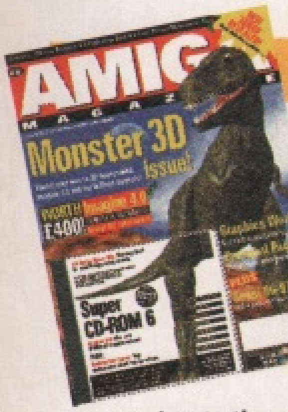
Upgrade to Personal Paint 7.1

There are plenty of reasons to upgrade your Personal Paint 6.6 cover disk to the very latest version 7.1, such as:

- **New Improved File Formats** These include GIF (licenced by Unisys), 24-bit datatypes, PBM and TIM (loads TIM graphics directly from Sony PlayStation CDs with extended TIM saving options for developers)
- **Professional Internet Features** AnimGIFs are supported and there's a map editor, plus tools for retaining image quality with reduced size/colour files.
- **181 ARexx Commands** Dozens of scripts available.
- **New Plug-In Library System** Makes it possible to add input/output modules and replace other parts of the system.
- **Automatic Thumbnails**

That's just a selection. See the ReadMe.txt document on the cover disk for a more complete list. The upgrade is being handled by Weird Science and comes on CD-ROM only, priced at £19.95. Contact Weird Science at: Weird Science, Q House, Troon Way Business Park, Humberstone Lane, Leicester LE4 9HA. Tel: 0116 246 3800. Fax: 0116 246 3801. E-mail: sales@weirdscience.co.uk www.weirdscience.co.uk

1997 Again...



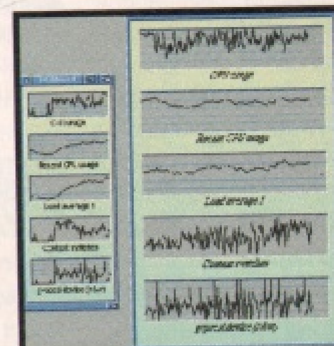
JANUARY

Phase 5 drop the A\Box bombshell with one of the longest, most technical press releases ever seen. CU Amig picks up the piece: and puts them back together in th shape of a brand new Amiga with the catchily named "Caipirinha" custom chi at its heart. The dazzling array of featur leaves many excited but confused and bewildered. Prototypes of their PowerU cards go on show in Cologne.

Quote of the month

"I think this festive thing has gone way too far."





5 YEARS AGO:

Commodore enjoy phenomenal success as they announce the sale of the first 1 million UK Amigas

HIGHEST SCORING REVIEW: EXECUTIVE **97%**



FEBRUARY

VIScorp abandon their bid for the Amiga as QuikPak become the new front runners according to the highly active rumour mill. VIScorp's Carl Sassenrath resigns and publicly expresses some strong opinions regarding his ex-employers in a notorious E-mail. CU Amiga visualises the A\Box as a sleek golden tower for its cover illustration and examines on its impact on the Amiga scene.



Quote of the month

"The interesting sounding 'World of Cheese' section is still under construction but there's still more fun to be had"

Tony Horgan



5 YEARS AGO:

No scandals, but Another World was released and Amiga activity is booming

HIGHEST SCORING REVIEW: UFO **93%**



MARCH

Speculation continues regarding ownership of the Amiga. QuikPak start to make ambitious noises about plans for the company they have not yet bought, even going as far as to announce a new Amiga range, and some quarters of the press prematurely hail them as the new Messiah. A date is set for the London World of Amiga show. VIScorp suffer more high level staff losses with the departure of Bill Buck.

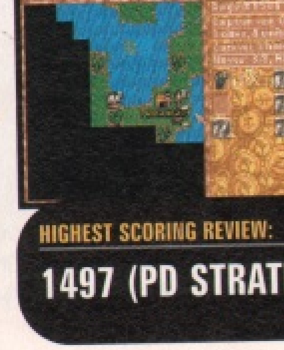
Quote of the month

"The only way you could have gotten this far is by walking around the shopping mall dressed in women's clothes"

Vampyra







5 YEARS AGO:

Amiga Centre Scotland releases the Harlequin "affordable" 24-bit graphics card, priced at £2,000

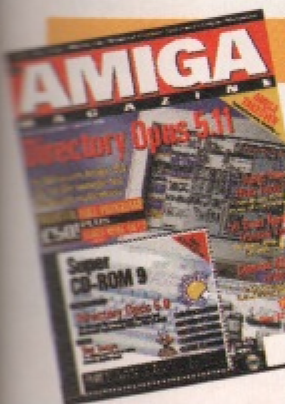
HIGHEST SCORING REVIEW: 1497 (PD STRATEGY) **93%**

We made it through in the end! 1997 was a year that tested the mettle and loyalty of the Amiga scene to the max. Allow us to present the edited highlights. Bear in mind our definition of time is based on the issue dates of CU Amiga which is why, for example, the 'World of Amiga' show crops up in the July entry. Anyway, on with the show...

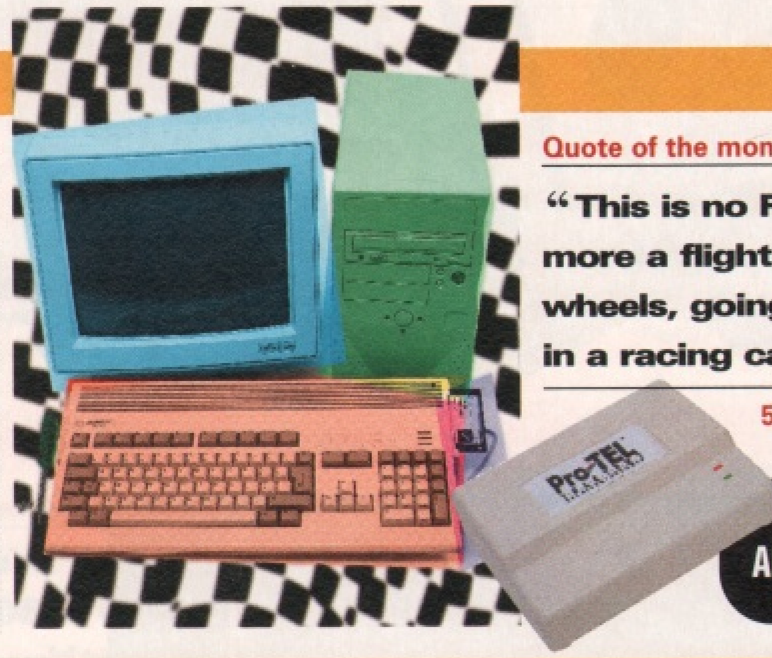
YEARS AGO: ...mmodore ...joy phenome... ...l success as ...ey announce ...e sale of the ...st 1 million ...K Amigas

97%

APRIL



As the official Amiga situation appears to go nowhere fast, third parties emerge with plans for new 'Amigas'. Co-operation is promised from the developers of the PIOS and pOS projects. CU Amiga tracks down the mythical TFX and promises to display it at the forthcoming World of Amiga show, while an Amiga Quake game engine appears very briefly on the Internet before id software take action.



Quote of the month

"This is no Ridge Racer, more a flight simulation on wheels, going round tracks, in a racing car"

50 Best Amiga Games

HIGHEST SCORING REVIEW:
ALMOST EVERYTHING
92%

5 YEARS AGO:
A good month for games as Project X gets 92% while the original Champ Manager scores 84%

...5 YEARS AGO: ...No scandals, ...but Another World was released and Amiga activity is booming

93%

MAY



Gateway buy Amiga in a shock move that appears to come out of the blue, just in time for a scoop announcement to be inserted into CU Amiga as it rolls off the presses. Amiga future looks "Bright" elsewhere after a healthy turn-out at the CeBIT show in Hanover, Germany, with Amiga clones and compatibles materialising in pre-production form. Everyone gets cautiously excited about it all.



Quote of the month

"Every time I log on to collect my E-mail I get some prat in America trying to sell me something"

Net God



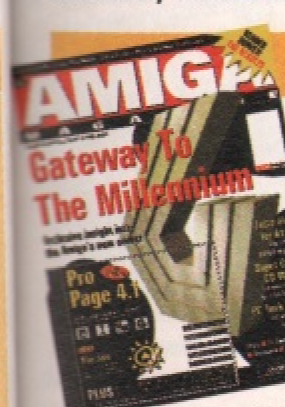
HIGHEST SCORING REVIEW:
LIGHTWAVE 5
94%

5 YEARS AGO:
A4000 is previewed. Very reasonable future Amiga wish list is ignored by Commodore

5 YEARS AGO:
Amiga Centre Scotland releases the Harlequin "affordable" 24-bit graphics card, priced at £2,000

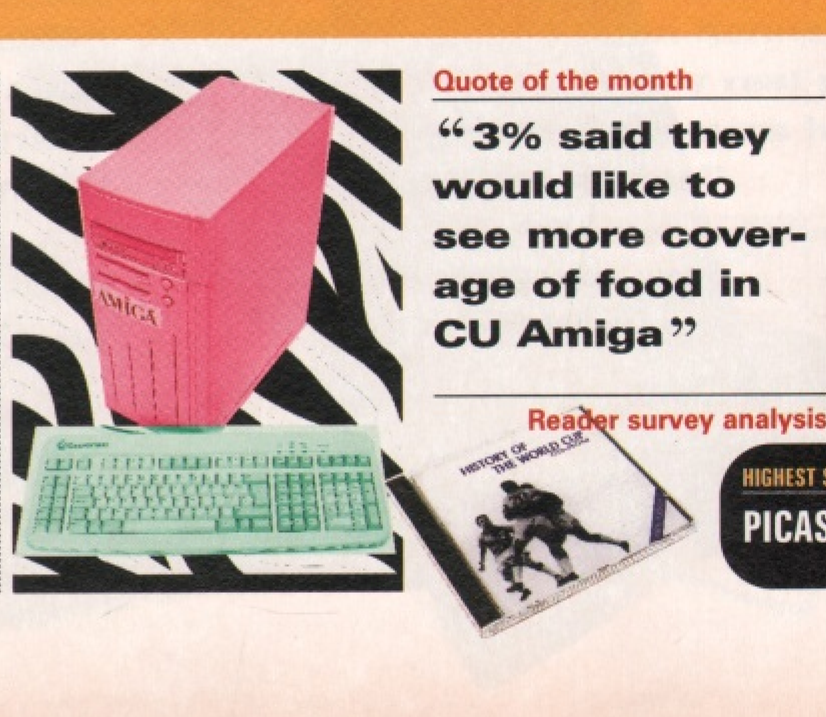
93%

JUNE



Gateway 2000 remain tight lipped about their reasons for the Amiga buy-out and their proposed plans for the future. Speculation reaches an all-time climax as the key players from within the Amiga scene are quizzed for their reactions to the news.

Sadly the UK's first Amiga magazine, Amiga User International, publishes its final issue. CU Amiga's popular DIY tower Amiga series reaches its conclusion.



Quote of the month

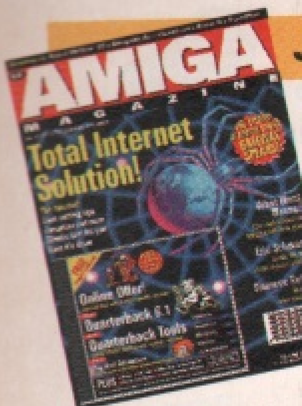
"3% said they would like to see more coverage of food in CU Amiga"

Reader survey analysis



HIGHEST SCORING REVIEW:
PICASSO IV
94%

5 YEARS AGO:
Commodore release the A600 and the A570 CD-ROM drive



JULY

The World of Amiga show in London goes down as a big success, with phase 5 joining forces with CU Amiga to display their PowerUP cards in the UK for the first time. TFX is also present and correct. Gateway's press conference is appreciated but reveals little other than their willingness to licence the Amiga technology to third parties, disappointing those hoping for an announcement of a new Amiga.

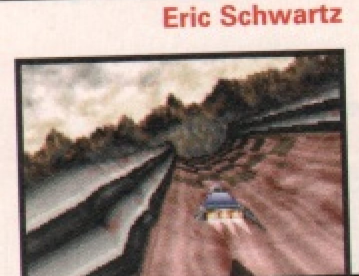


Quote of the month

"I own two pet chinchillas and have become a hobbyist chin breeder – although not necessarily by choice"

Eric Schwartz





HIGHEST SCORING REVIEW:
SIAMESE 2.0 **95%**

5 YEARS AGO: Commodore cease production of the A500 Plus. CU Amiga exclaims "A500 is dead"



AUGUST

Good things are happening. As phase 5's PowerUP cards near completion, CU Amiga explains just how fast these little babies are, whilst reporting on the gaming potential of these super-machines. Index Information and Micronik both announce their new officially licenced Amiga clones. The model from Index looks more like a large external hard drive than an entire computer.



Quote of the month

"You thought a 68060 was fast? You'll be able to tile your bathroom with the things before long"

Tony Horgan

HIGHEST SCORING REVIEW:
VOYAGER NG, CINEMA 4D & MAGELLAN OPUS 5 **92%**

5 YEARS AGO: Commodore announce "cracking deal" in which an A500 can be part exchanged for £200 off a new CDTV (normal price £599)



SEPTEMBER

Chinese company Lotus Pacific announce their acquisition of the rights to produce Amigas for sale in the Far East, while Gateway 2000 dispute it. Speculation that Lotus got these rights from "a bloke down the pub" is countered by their version that goes back to Escom selling them in 1995 on to a 'middle man', REC, who then passed them on to Lotus. Lots of hot new games on the horizon.



Quote of the month

"Grasshoppers have got six legs – connected at the thigh, they've also got a pair of wings – but they cannot fly-y"

Tony Dillon



HIGHEST SCORING REVIEW:
MICRONIK MG-25 GENLOCK **95%**

5 YEARS AGO: A600 gets £100 taken off its retail price and falls to £299 as speculation rises about more new Amiga models

nmodore
ase produc-
n of the
00 Plus. CU
iga exclaims
500 is dead"

95%

5 YEARS
AGO:
Commodore
nnounce
'cracking deal"
n which an
A500 can be
art exchanged
for £200 off a
new CDTV (nor-
mal price £599)

D 92%

5 YEARS
AGO:
A600 gets £100
taken off its
retail price and
falls to £299 as
speculation
rises about
more new
Amiga models

CK 95%

OCTOBER



TFX is here! Overshadowing all other Amiga events, CU Amiga exclusively releases TFX, the best Amiga game ever, with the October issue. For many this is the highlight of the Amiga year. Gateway 2000 set up Amiga Inc in South Dakota USA to act as research and development, freeing up the German based Amiga International to concentrate on sales and marketing. CU Amiga officially becomes the UK's biggest selling Amiga magazine while Amiga Computing and Amiga Review magazines close.



Quote of the month

"Before the bogey shakes off the lock, let him have it with a sidewinder up the tradesman's entrance"

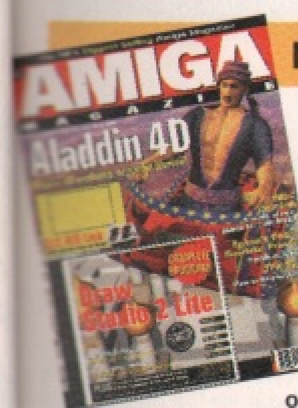
TFX guide



HIGHEST SCORING REVIEW:
ZYXEL OMNI.NET
95%

5 YEARS AGO:
A4000 is unveiled at short notice to a US crowd, catching the press unawares

NOVEMBER



The first batch of PowerUP PowerPC cards finally become available. An A1200 PowerUP card with an optional 'graphics card' add-on is also announced. CU Amiga's best DIY project yet, AIR Link, sees a free PCB stuck on every issue and offers the possibility of controlling a range of devices from an Amiga. A renewed mood of optimism pervades in the Amiga trade and amongst users. One of the year's major software releases turns up in the shape of Nova Design's Aladdin 4D.

Quote of the month

"... combine it with this month's DIY project and then make yourself the world's first remote controlled portable Amiga in a shopping trolley"

Backchat





HIGHEST SCORING REVIEW:
VISUALFX
96%

5 YEARS AGO:
A4000 arrives in the UK, while the CDTV is reported to be "taking off" with 12,000 UK sales and 10,000 each in Italy and Germany

DECEMBER



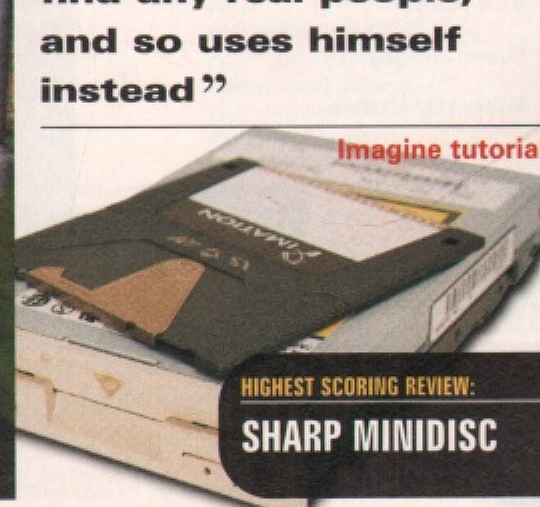
Everything turns up at once as Click-BOOM's conversion of Myst, phase 5's PowerUP and even Champ Manager 2 arrive in the same month that people start to question the longevity of the PowerPC range. Cloanto announce the Amiga emulator, defiantly named Amiga Forever, for the PC. Amiga users vote Monkey Island 3 top of the list of games they want to play.



Quote of the month

"John Kennedy can't find any real people, and so uses himself instead"

Imagine tutorial



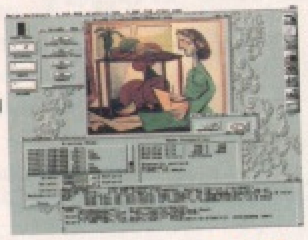
HIGHEST SCORING REVIEW:
SHARP MINIDISC
97%

5 YEARS AGO:
The A1200 turns up, but curiously the Amiga press seems more interested in playing with morphing software

SOFTWARE

Amiga Forever

Commercial Amiga emulator for the PC.



Includes Amiga operating systems, ROMs and emulation software pre-installed. Picasso96 driver (8/16/24-bit) and "Amiga Explorer" networking solution.

£ 49.95

AWeb II V3.0

Surf the Web on your Amiga!



£29.95

AWeb Get it Now!

Art Effect

ArtEffect uses the concepts of industry standard Art packages and brings them to the Amiga.
V2.0 now with Layers and Virtual Memory!



ArtEffect V1.5	£ 59.95
Art Effect V2.0	£119.95

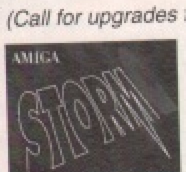
Storm Software

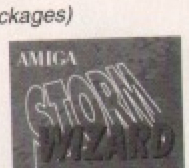
StormC V2.0 Base Package Non Commercial license	£119.95
StormC V2.0 Base Package Professional unrestricted license	£179.95
StormPowerASM V3.0	£ 99.95
StormWIZARD V2.0 – GUI creation	£ 69.95

Add-on Modules (All require Storm C base package)

StormC V3.0 - p.OS-Module	£ 49.95
StormC V3.0 - PowerUp-Module	£119.95
StormC V3.0 - PowerASM-Module	£ 69.95

(Call for upgrades for any of these packages)





Burn-It

Powerful CD-Burning software which is available in Track-at-Once and Disk-at-Once versions. TAO will fulfil most CD-Burning requirements, but DAO is required to product 100% duplicates or no standard pre/post gaps.



Burn-It TAO	£ 69.95
Burn-It DAO	£109.95

Fusion

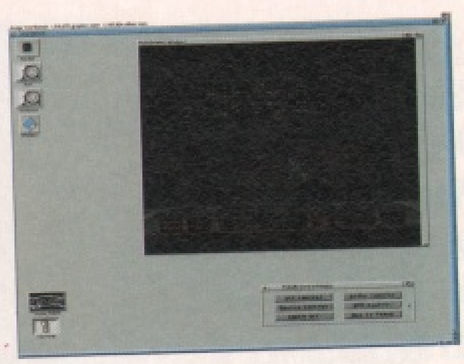
FUSION – The ultimate Software Mac Emulation

Runs practically all the latest Mac software. Latest System 8.0 support! (Macintosh ROM's required)
Why consider a Mac when the Amiga can do it for you!



FUSION

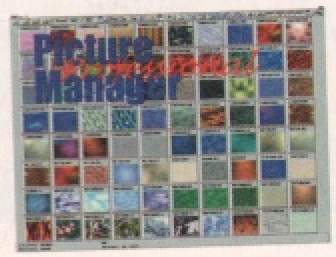
£ 49.95



Picture Manager Pro

Picture Manager Professional

All-in-one graphics tool for automatic format conversion, searching, printing, image processing, PhotoCD access and more!



Picture Manager Professional V4 £39.95

Tornado 3D

Tornado3D is a superb Rendering and Animation package. £179.95

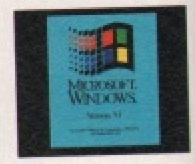


TORNADO 3D

PCx

PCx - Software PC Emulation - Advanced 80x86 PC emulation.





PCx

£ 49.95

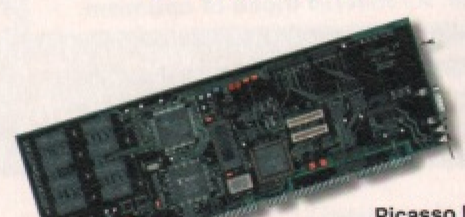
HARDWARE

Various

Monitor Adaptor (23-pin mon. to 15-pin gfx)	£ 14.95
VGA Adaptor (23-pin Amiga to 15-pin mon.)	£ 14.95
Floppy Drive 1.76Mb int. (1200/4000 1" high)	£ 54.95
Floppy Drive 1.76Mb Ext. (No patch!)	£ 59.95
8 Mb 72-pin SIMM RAM	£ 29.95
16Mb 72-pin SIMM RAM	£ 54.95
32Mb 72-pin SIMM RAM	£ 99.95
1.2Gb IDE Hard Drive	£129.95
2.1Gb IDE Hard Drive	£159.95
12X IDE CD-ROM	£ 59.95
24X IDE CD-ROM	£ 79.95

CatWeasel floppy controller (A1200/A4000) Use inexpensive PC floppy drives (DD/HD)	£ 49.95
IDEFix 97 - Buffered A1200 4-Way IDE I/F Includes registered Atapi software	£ 34.95
CatWeasel Zorro Six IDE devices + All Catweasel functions	£ 69.95
Buddha Four IDE devices for the A4000	£ 44.95
Siamese V2.5 Software packs TCP/IP, RTG and CyberGraphX support software	£ 44.95

Picasso



Picasso IV
Without doubt the most stunning graphics card yet for the Amiga. No wonder CU Amiga claimed this to be *"The God of Amiga Graphics Cards!"*

Integrated flicker fixer, 4Mb EDO RAM, Autosense Zorro II or Zorro III

£249.95



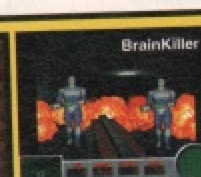
Picasso II+
The cheapest route to fast, high resolutions and high colour graphics! Zorro II

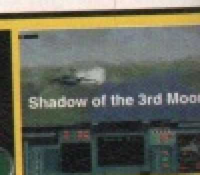
£129.95



Trapped II – Stunning high end 3D game!	£19.95	**BrainKiller** – 3D Shooter	
NeMac IV – The Directors Cut!	£19.95	**Sword** – Novel Platform Game	
Shadow of the 3rd Moon – Voxel Flight Sim	£24.95		







Christmas Compos

The turkey filled days of Yule are approaching rapidly. 'Tis the season for giving, so get your postcards out and get scribbling – it's competition time!

We've shown a lot of restraint this year. No photos of the team wearing paper party hats, no rendered reindeer in the margins, and we even persuaded our publishers against putting a model in a santa suit on the cover. We do, however, like getting drunk, sleeping through the Queen's speech and eating turkey for a week and a half as much as anyone. So we have got together with some like minded Amiga companies to bring you this Christmas Compo Bonanza! All the normal rules apply, no entries from anyone in the employ of Emap Images or the relevant company, the editor's decision is final, the deadline is January 31st 1998 and all complaints will be ignored. Merry Christmas!

Alive Media

This new games house and specialist retailer of old and hard to find Amiga books and games, publishers of Blade and the forthcoming Haunted, has offered us 5 special Christmas Hampers to give away. Each contains an assortment of games, hints and tips books, plus a copy of Blade, which scored 86% last month. To win one of the hampers, just tell us in 20 words or less what you'd like for Christmas. Answers on a postcard only to:

Alive Xmas Compo,
CU Amiga Magazine
37-39 MillHarbour,
Isle of Dogs,
London E14 9TZ

Epic Marketing

Epic Marketing are a leading producer and distributor of Amiga CD-ROMs, and have recently moved into games in a big way with their Islona games label. They have offered a juicy £100 worth of software to the winner, with 10 runners up getting any title up to £25 value. Prizes will be awarded on a first out of the hat basis. Postcards to:

CU Compo,
P.O. Box 637,
Swindon,
Wilts, SN2.

Guildhall Leisure



Guildhall have been THE software distributor for the Amiga for ages. They have recently published titles such as Street Racer and Ultimate Gloom. They are also publishing CD re-releases of titles such as Civilization, Dpaint V, and Ultimate Blitz. Guildhall have kindly offered to give away one of the above mentioned titles to the first 20 postcards pulled out of a hat.



Postcards to:

Guildhall Xmas Compo,
CU Amiga,
37-39 MillHarbour,
Isle of Dogs,
London E14 9TZ.

Power Computing

Power Computing is the largest supplier of Amiga hardware in the UK. They've been flogging their large range of accelerators, scanners, floppy drives etc. for years. Recently they dipped their toes into games publishing with the excellent CD-ROM game the Big Red Adventure, which we gave storming 90% to in May. Power want to spread their Christmas cheer by giving away 10 copies. Just answer to this simple question – What country did Roberto Baggio and Leonardo DaVinci come from? Answers, as ever, on a postcard to:

Power Xmas Compo,
CU Amiga Magazine
37-39 MillHarbour,
Isle of Dogs,
London E14 9TZ

Blittersoft

For years Blittersoft have supplied hardware and software for the high end user. They've entered co-operation with Index Information over the forthcoming BoXeR computer. In the mean time, you could get yourself a not quite so good new computer for Christmas by winning one of two copies of Fusion, the top Mac emulator, along with 2 copies of Picture Manager pro, reviewed on page 62 of this very issue. To win one of these prizes, just tell us what a blitter chip is. Answers on a postcard to:

Blittersoft Xmas Compo,
CU Amiga Magazin
37-39 MillHarbour,
Isle of Dogs,
London E14 9TZ.

Weird Science

Weird Science is a company with its fingers in more than a few plum duffs. They have produced numerous succesful CD-ROM titles and their close co-operation with German CD-ROM firm Schatztruhe GTI has given them UK distribution of the famous Aminet CDs. Weird Science are giving away an amazing complete Aminet collection – Aminet sets 1-5, to 3 winners – and if this great prize wasn't enough, they are offering a chance to win one of the 8 Network PC systems they are offering. These cable/software solutions allow files to be easily and freely exchanged between the Amiga and a PC. Funniest postcards win the prizes! Mark your postcards either Aminet or Network PC and send them to:

Weird Science Compo,
CU Amiga Magazine
Isle of Dogs
London
E14 9TZ.

Eyetech Group Ltd

Eyetech are a the company with the answer. If there's a way of squeezing some extra piece of hardware onto your Amiga, Eyetech probably know it. Their big hit at the moment is their excellent and easy to build EZ-Tower A1200 tower systems which open up a wealth of expansion options. Get a Christmas present you will never regret, and Eyetech will help you out. Cut out this coupon and include it with your order and Eyetech will give you £20 off the cost of an EZ-Tower or £10 off the cost of an EZ-Tower DIY kit. This offer is limited to orders recieved before 31st January 1998 and is valid for the price advertised in this magazine. This offer is not valid in conjunction with any other offer.

Telephone Eyetech on 01642 713185 or check out their ad on pages 29 and 71.

Eyetech's Christmas Crackers: 4-speed CDROM system - £99.95!!!; A1200 Magic Packs w/£180 worth of vouchers - £249.95; EZ-IDE s/w from £12.50; 030 accel's from £68.95 ; 040/25MHz (19 MIPS) £138.95; 39 Mips '060/50MHz £278.95; A600 33MHz '030/MMU/FPU/standard simm to 32MB - £99.95; DIY-EZ-Tower from £99.95; 8-speed CDPlus £149.95; 460KPortJnr £44.95; LS120 £114.95; (Price down, New)

Q. What fits in a floppy bay and reads & writes 120 MB PC & Amiga cartridges AND 720KB & 1.44 MB PC diskettes?

A. The All-New LS120 ATAPI drive from Eyetech



- *120MB backup and PC 1.44MB diskette compatibility in one unit*
- *Bare Drive just £114.95 .120MB cartridges just £14.95/1 or £34.95/3*
- *EZ-IDE universal EIDE driver software is required - 50% discount when ordered with the LS120 or 4-device buffered interface . Upgrades available from Eyetech-supplied IDE-fix available - see below right.*

HEALTH WARNING *"A buffered IDE interface is essential to avoid overloading of the A1200's IDE port when adding extra devices"- John Kennedy - AF - July 1997*

Don't be tempted to skimp. Fit an Eyetech 4-way IDE/ATAPI 3-chip buffered expander to preserve your Amiga's Health. *The original and best - Just £39.95.* Now with 50% discount off EZ-IDE software

The Mk2 EZ-TOWER



"This definitely one of the easiest solutions to building your own tower." John Kennedy, Amiga Format - July 97

Mk2 EZ-Tower with DFO: faceplate/cable- £119.95
DIY option - all parts/instructions provided - £99.95
Collection, fitting and delivery service- *Please ring*

See our full-page EZ-Tower feature advert in this magazine

... Or buy a CDPlus unit (below) and get an EZ-Tower for just £99.95*
(*as an alternative to the regular CDPlus case)

The Top-Rated Eyetech *CDPlus* for the A1200

- 8-, 16- or 24-speed external CDROM unit in quality, CE-approved case with heavy duty PSU
- Leaves trapdoor free for accelerators / memory expansion and the PCMCIA slot free for digitisers, modems, samplers etc
- Option to add additional HD's, CDRoms, LS120s, SyQuests, *IDE Zips*, Jazs, SyJets, ATAPI tape streamers etc powered from the CDPlus unit
- Comes with special Eyetech *'060-compatible* Mk2 4-device EIDE buffered interface board - easily fitted in minutes with no cutting/drilling (Note that IDE CDROMS *must never* be directly connected to the A1200 without a buffered interface - ask any qualified electronics engineer!)
- Gold plated audio phono sockets at rear (CD+ only) and front panel headphone socket and volume control

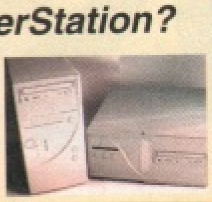


The CDPlus and SyQuest EZ135 drives. The IDE Zip Drive is the same size as the EZ135

Amazing Value *NEW!* 24-Speed *-only £199.95*
8-speed - *only £149.95* 16-Speed *-only £179.95*

Considering a PowerStation?

The CDPlus is now available with a, 230W, CE-approved, PC MiniTower* or Desktop* case (which can also power your A1200) - *for only £20 extra*
(*as an alternative to the regular CDPlus case)



Amiga User International - *97%*
"... It all worked faultlessly ... "
Amiga Format - *96%*
"... An absolutely superb bit of kit.."
Amiga Shopper - *90%*
"... This is a quality product..."

Amiga 1200 Magic Packs



- Direct to Eyetech from Amiga International Inc.

- Full UK specification with Kickstart 3.1/Workbench 3.1 disks and manuals, UK psu, mouse, mousemat and TV lead.
- Fantastic software bundle including Wordworth 4SE,Turbocalc 3.5, Datastore 1.1, Photogenics 1.2SE, Personal Paint 6.4, Organiser 1.1, Pinball Mania and Whizz
- Three very special Eyetech bundles designed to meet every need and budget - all with 12 months return-to-base warranty

The Eyetech Starter Pack *Just £249.95*
- Diskette pack as above with 2MB graphics/program memory and built in hard drive interface. Hard drive and memory expansion recommended for non-games use.
- ***Over £180 worth of discount vouchers for future hard drive, CDROM, accelerator/ memory and EZ-Tower upgrades from Eyetech***

The Eyetech Productivity Pack *Just £299.95*
- As above with 2MB graphics/program memory and ***170MB hard drive*** . Just switch on & use straight from the box!
- Scala MM300 preinstalled on the hard disk (needs 4MB memory expansion to run properly)
- ***Over £180 worth of discount vouchers for future hard drive, CDROM, accelerator/ memory and EZ-Tower upgrades from Eyetech***

The Eyetech *EZ-Tower* Professional Pack *Just £799.95*
- Full ***EZ-Tower*** with ***EZ-Key*** keyboard adapter, ***Windows95 keyboard***, and ***250W psu***, with software and manuals as above and with mouse, mousemat & TV lead. (No A1200 k/b or psu)
- ***25MHz '040*** processor (approx 19 Mips) with MMU & FPU and ***16MB*** of program memory.
- ***1.7GB TowerDrive*** with Workbench 3.1 and shareware utilities preinstalled
- ***8-speed CDROM*** including the ***Eyetech 4-device buffered interface*** and ***fully registered CDROM/hard drive/IDE Zip drive/LS120 driver software preinstalled***
- ***880KB floppy drive*** including faceplate
- Fully installed and tested together with all relevant cables and manuals

AND the option to have fitted:
- An ***LS120*** 720KB/1.44MB/120MB drive/cable for ***just £99.95 extra*** (at time of purchase only)

EZ-IDE

New! Only available from Eyetech - *the* Amiga IDE/ATAPI peripheral specialists. Probably the only hard drive/CDROM/LS120/ZIP/SyQuest s/w you'll ever need.

- Supports LS120, Zip, Jaz, SyQuest and other IDE/ATAPI removable cartridge drives AUTOMATICALLY. Cartridges just appear on the Workbench when inserted and disappear when ejected! Eyetech's IDE ZipPrep Tools are also included.
- Optimises IDE hard drive performance automatically. Eliminates 'MaxTransfer' nightmares.
- Extensive CDROM support including multidisk changers, direct digital audio transfer, CD32 emulation, high performance filesystem support for Amiga, Mac and PC CDs.
- Ready-to-use as shipped. No sending away to foriegn parts for registration codes as with the 'commercial' versions of IDE-*fix*97 and Atapi Pn'P.

EZ-IDE s/w	£34.95
Upgrade from Eyetech-supplied* IDE-*fix*	£12.50
With* 4-dev i/f, CDPlus, IDE Zip or LS120	£17.50
Competitive u/grade*	£24.95

**Trade-in & proof of purchase required*

Xmas '97 Special - limited availability
4-SPEED A1200 CDROM SYSTEM FOR JUST £99.95!

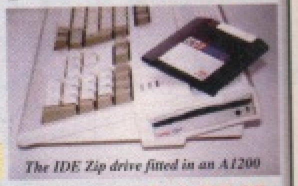


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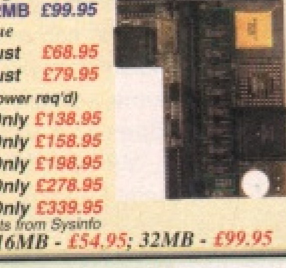
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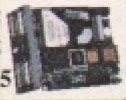
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Remixing with the Pros

Dex and Jonesey have proven themselves to be some of the best dance remixers in the business. How do they do it?

Those undisputed stars of the club remix scene, Dex & Jonesey have already proven that a couple of Amigas and a copy of Protracker is enough to launch and sustain a career in the music business.

An inspiration to anyone struggling to express their ideas via a basic Amiga set-up, they've stayed true to their roots and not abandoned the machine that helped them crack the big time.

When we first exposed the Dex & Jonesey phenomenon back in the September 1996 issue of CU Amiga, they were riding high on the success of their remix of Josh Wink's Higher State of Consciousness which managed an impressive number 7 placing in the UK charts. Since then they've seen the remix work continue to roll in from the biggest names, with some recent jobs including makeovers of Hardfloor's awesomely classic 'Acperience 1' and Usura's 'Open Your Mind'.

We spoke to Dex, otherwise known as Andy McEniry, to find out the secret of their success.

CU Amiga: How do you get your remixing jobs? Do you have an agent or manager who gets work for you?

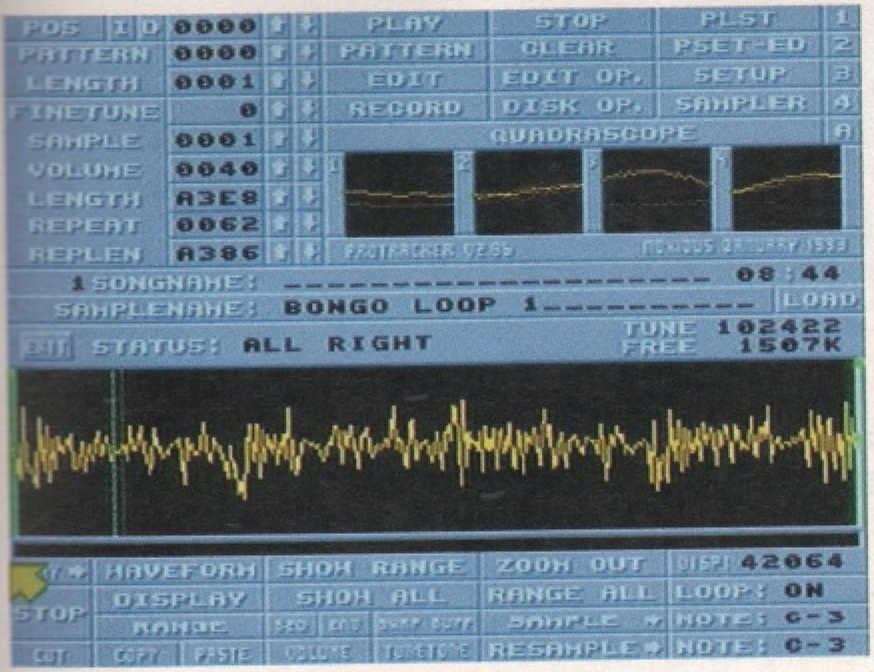
Dex: We originally started producing our own records as a result of our DJing work. We both had a few ideas and we knew the basic structure of dance records were all generally similar, so we decided to go ahead and make our own tracks. Our track entitled 'The Beginning' was signed to Judge Jules' label 'Bang International' and this led us to the Josh Wink situation.

We knew 'Higher state of Consciousness' was inevitably going to be re-released, so we took my original Strictly Rhythm import 12", and remixed it. We took it to Jules and it soon became the official remix. From there on we found a representative in the form of John Cecchini at Red Parrot Management. We knew him very well from his days at Zen, Dartford (the club at which we were resident DJs). John got us work from various labels and handled all enquiries about us.

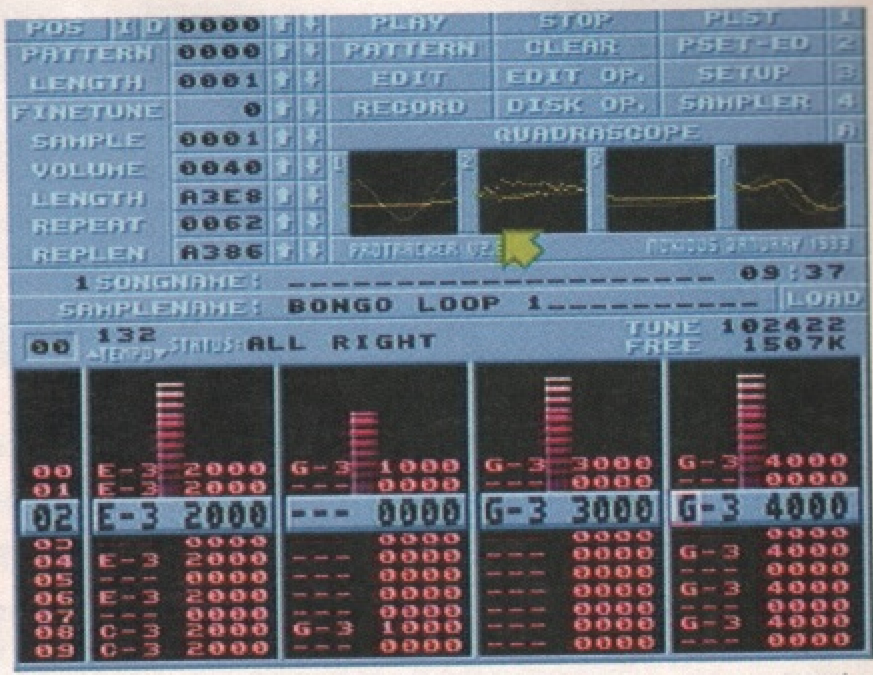
CU Amiga: Do you accept any remix job

Top tip: echoing samples

It's always good to echo samples as it gives them more feeling and depth. For the vocal echo of 'Open your mind' I actually used two samples, the first saying 'Open your' and the last saying 'mind'. This meant that I could freely re-trigger the 'mind' sample on every beat and have full control over the volume of the echoes.



▲ Good old ProTracker is at the heart of every Dex & Jonesey remix.



▲ In fact, two Amigas running two ProTrackers are used for the job to double up to eight tracks.

Top tip: jazzing up the percussion

When adding claps and hi-hats, don't just put them in at the standard places. Try moving them around or echoing them. For example, if you've got a hi-hat between every beat try adding a hi-hat 1/4 beat either side of every one, at half the normal volume. This gives a nice funky variation, and this can be used with claps as well.

that's offered to you (assuming the financial deal is OK) or do you pick and choose?
Dex: We don't accept any remix offer until we have actually heard the track. We only accept tracks that we believe we can create a good remix of and will not ruin the reputation we have been building up. If a track does not appear to have any hooks or original parts we do not accept it, as it would mean us basically creating our own track which will not be released under our name.

CU Amiga: Once you've got a remix job to do, are you given a brief from the record label as to how they want it remixed, or do they just leave it up to you?
Dex: Generally once we've accepted a remix offer, the record label involved will tell us roughly the style in which they would like us to remix the track, whether it be commercially based, vocal club style, banging dub etc... Apart from this they leave us to our own devices and wait for the result, which is the way we prefer working.

CU Amiga: What does the record label supply you with to do the remix?
Dex: If the track we are remixing is a new track, then we would normally receive a cassette copy of the current mixes and we then let them know whether we have accepted the mix or not.

If the track is a re-release or is familiar to us, such as Outrage's 'Tall 'n' Handsome' then we would know instantly whether to accept the offer or not. Either way, as soon as we have accepted a mix, the parts (loops, vocals etc.) are sent to us on a DAT if they are available, and we can then get straight on with the remix.

CU Amiga: Do you have any standard method of remixing a track that you use every time?
Dex: Generally our first step is to sample all the parts we have received. In the case of a very vocal-orientated track, such as Phil Collins' 'Dance Into the Light' we decide which vocals to use and which not to before we start sampling. The next step is to decide on a BPM according to the original track and style of remix required. Once the BPM has been agreed, we lay down all the samples and adjust them so they loop correctly at the new tempo. Theoretically all the samples should receive the same adjustments, but this is not always the case unfortunately.

We then basically decide on which beats, loops, bass-sounds etc. we are going to use and put everything on a Protracker block. We then cut out each element individually and in groups to decide which combinations of samples work well together and which don't.

After this is all done it's on to structuring the track as you would hear it in the final version, then some inspiration sets in and no two remixes ever go the same way.

CU Amiga: How do remixers get paid?
Dex: Most remixers get just a one off payment and no royalties are paid. In the case of 'Higher State' we had agreed a bonus payment if it got into the top 20 in the national charts. It actually went straight in at number 7.

CU Amiga: What advice would you give to aspiring producers and remixers?
Dex: The main advice production wise is obviously not to copy anyone else's style but to try to create a style of your own. Don't be afraid of trying different techniques. Also, read the manuals or text files that come with the programs you are using, they will help you no end.

Before I had even bothered to take a look at the text file that comes with Protracker, I was having to enter in all of the volume commands for snare drums one by one (ie typing C01, C01, C02... for 128 lines) until I finally realised that you can enter one line and use the ALT key with - , + or / to change the values without having to enter them all manually. It does save a lot of time, believe me!

CU Amiga: List the gear you use at the moment.
Dex: The Usura remix was done on the same basic equipment as Higher State of Consciousness: 1 Amiga 500, 1 Amiga 1200, 1 Realistic SSM-2200 mixer, 1 Sony TCD-07 DAT machine, 1 Technics 1210 turntable, 1 GVP DSS8+ Sampler and ProTracker 2.2a.

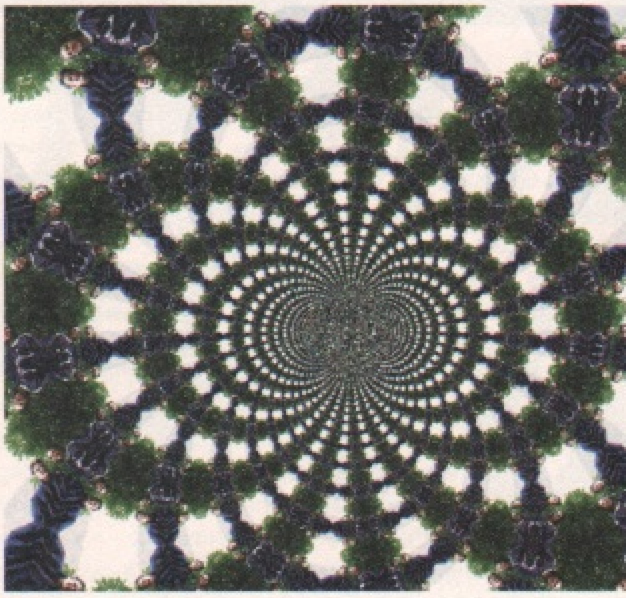
Top tip: background noises

A little trick I sometimes use and indeed I did in this remix was to copy the bass note to a spare sample slot and then make it a few octaves higher. This creates a sort of blip sound which I used in the first break to give an extra sort of depth. It doesn't really do anything for the song but it's there and subconsciously you notice it.

Of course you don't have to worry about any problems with the key because it is actually the bass sample which you've tuned already but it's just a lot higher. This technique can be used with any sample that is in key without any major worries, apart from loops for obvious tempo reasons.

A remix in the making: Open Your Mind

Usura's Total Recall-sampling melodic trance anthem 'Open Your Mind' has recently been revamped and re-released with the help of a rather harder than usual Dex & Jonesey remix. Andy McEniry takes us through the process from start to finish and divulges more than a few handy hints along the way...



1. Sample your wares

The first stage was to sample the various parts of the track and get them in sync with the chosen tempo, in this case 135 BPM. When I approached the next stage, which was creating one page with all the parts on it, I noticed that the main loop was six bars in length and not two, four or eight which is generally regarded as standard. The way the loop was structured was that the first four bars were the same but the last two had various note changes. All I had to do was work out these changes. The obvious way to do this was to play a bass note alongside the main loop and spot what changes were required. The bass note sample I was using was in key when triggered by the E key on the Amiga (which happens to appear as the E note in Protracker). I played the six bar loop over and over again until I had worked out the different notes required.

2. Creating the bassline

With the note changes sorted, I now went on to creating the bassline. I decided to go for a fancy bassline rather than a basic bass-note between each beat. The track was in key with my bass-sample when triggered with the E key (note: this does not mean it is actually in the key of E, it's just that I sample everything using the Y Key for better quality – 27,928kHz).

3. Sourcing the drumloop

Quite often, as in this remix, no drumloop or percussion was supplied, so the hunt for a drumloop was once again started. I have quite a vast record collection and that means a big selection of loops. After a little search I finally found a volunteer. Moby's 'Go' provided the answer, so I sampled it up. There are two main rules I try to stick to when sampling drumloops and here they are...

a) Always try if possible to sample the loop at the same tempo as your track. The reason for this is that you should not have to adjust the pitch control in the program, which means you do not lose quality unnecessarily and also if you have more than one sample of the same length and they are all at the same pitch you can mix the samples together which will free up one of your channels allowing you to include an extra element. This is where the pitch control on the Technics 1210 record deck comes in useful.

b) Sample the loop with the bass cut out using a graphic equaliser. The reason for this is to prevent phasing or clashing of two or more bass drum beats. You can of course boost up the midrange or treble using the equaliser to give the loop more kick. This also gives you freedom to use the rest of the percussion in the drumloop and then add a bass drum whenever you want to.

4. Structuring the track

With the main loops in key and drumloops sampled I was ready to start to structure the track. When creating a record that is aimed to be played at night-clubs, you need to consider the DJ has to be able to mix it in without much of an effort, so for this reason I gave 16 bars of beats before the bassline came in. I could have let it go for longer but you have to remember that when it's being played on a CD, for example in someones house, they don't want to listen to two minutes of plain beats and loops, so a compromise has to be reached and between 16 and 32 bars I regard as acceptable.

Obviously you don't want all your percussion and drumloops in with the beat from the off, otherwise it has no way of progressing. If you listen to the intro you will notice that eight bars after the bassline kicks in, extra percussion comes up. In fact, I had only used the first half of my drumloop before hand (one beat in length) and at this point I let it go the full length of two beats. This is a good way of making extra sounds appear without having to have another free channel.

With the DJ friendly intro gone, I decided to go into a little drop to stop the beat from getting monotonous and I also brought up the little blippy noise as described in the 'Top tips'. Then I also brought up some little sound effects that I found on a sample CD just to give more life to the track. Next it was time for the 'drop'.

The only requirement asked by Malarky records was that the general dynamics of the original drop were kept, as all the other mixes so far had gone off at a bit of a tangent. Once all the elements had been included it was just left to decide how to break out of it all and make the rest of the track different. There are thousands of possible combinations for how a track could go, and sometimes I think I've tried them all but there is always something new to do and that is the main objective: find them and use them. ■

Andy McEniry

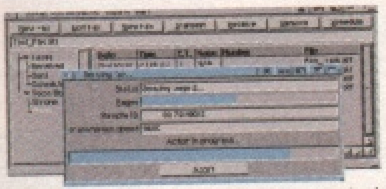
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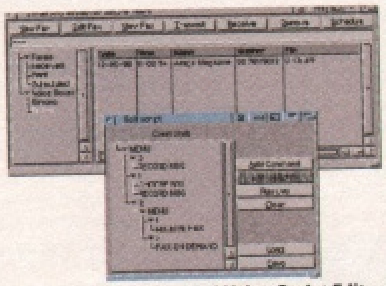
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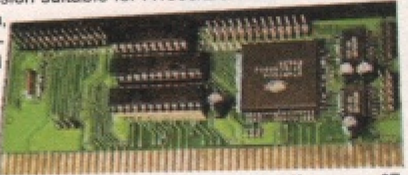
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Hypercom3Z	Zorro-II	2 x 460,800bps highspeed buffered serial ports 1 x 500K bytes/sec buffered parallel port	£79.95

Vaporware Software

If you are not interested in purchasing NetConnect you can also buy Vaporware Products individually either by disk, a keyfile sent via e-mail (quickest and cheapest method) or on CD-rom (currently only Voyager-NG and Genesis can be purchased on CD-rom) - CD versions have added extras such as pre-setup MIME types (VNG), HTML documentation etc.

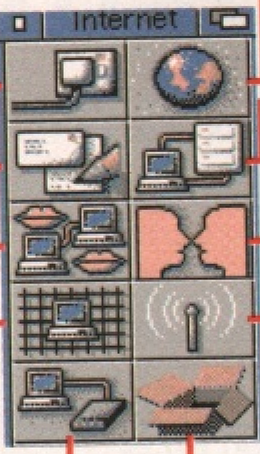
	On CD	*By Disk*	*By EMail*
Genesis - New TCP/IP Stack for the Amiga [Available December]	£28.00	£22.00	£20.00
Miami - TCP/IP Stack for the Amiga	n/a	£28.00	£26.00
Octopus - Brand new dock bar creator [Available December]	n/a	£12.00	£20.00
Voyager Next Generation	£28.00	£22.00	£10.00
Microdot-II	n/a	£20.00	£18.00
AmIRC	n/a	£20.00	£18.00
AmFTP	n/a	£20.00	£18.00
AmTalk	n/a	£14.00	£12.00
X-Arc	n/a	£14.00	£12.00
AmTelnet	n/a	£17.00	£15.00
AmTerm	n/a	£17.00	£15.00
AmTelnet + AmTerm Package Deal	n/a	£20.00	£18.00
AmigaNCP - Amiga to Psion series software	n/a	£27.00	£25.00

- *5% Discount when 2-4 Vapor products are bought, 10% Discount for 5+*

NetConnect v2

NetConnect v2 is even easier to connect to the Internet! Launch the new Wizard GUI, choose your modem, enter a few user details and let the Wizard do all the rest for you! Simple! With version 2 you don't even need to worry about the provider - everything is automatic, everything is point and click! ***Amiga Format*** concluded about **NetConnect v1** (June 97 issue): "Almost the perfect package for the Amiga Internet user", "If you need to get online, this is the easiest way to do it" and "It's good value for money too - especially the bundle including the 33.6K modem." We have listened to our NetConnect v1 users, noted their comments and added some other new features. NetConnect v2 is available on CD-rom and floppy disk.

11 Commercial Programs within NetConnect v2!



AMITCP-GENESIS
Genesis is a new professional TCP stack, enhanced and developed by us and NSDi (developers of AmiTCP) with full GUI control - point and click Internet setup! Allows Internet and local networking connectivity.

MICRODOT-II
A superb combined email and newsreader within one GUI! Contains all the major features you would expect - MIME attachments, support for POP3/APOP, search function, multiple signatures, multiple user support, Arexx port etc.

AMIRC
Chat online with friends about topics, join conferences, organise mass meetings. The IRC is one of the most addictive elements of the Internet - AmIRC is the best Amiga IRC client.

AMTELNET
Telnet into remote computers (from anywhere in the world) - edit files on a computer in Germany from your Amiga, maintain directories for your web pages, check the status of the network, play online games.

AMTERM
AmTerm is a communications package which allows you to connect to a BBS, to another user (direct link), transfer files via a serial connection (Amiga<>Amiga, Amiga<>PC etc).

VOYAGER-NG
Voted the best Amiga web browser by CU Amiga - supports SSL for securing ordering, HTTP 1.1 (for the fastest web access) fastmem AGA support (use fast mem to store images) and very soon JAVA™, Javascript and AGA fastmem support!

AMFTP
AmFTP is the ultimate Amiga FTP client. Download/upload programs from any FTP site, also supports ADT to allow you to download the latest files from the Aminet and Archie to search FTP sites for files.

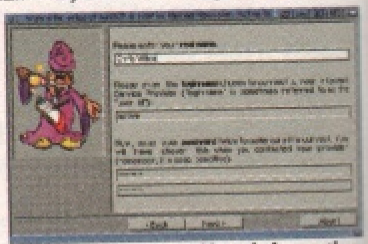
AMTALK
A direct chat client for the Amiga. Acts as an online answerphone service for people to leave messages. You can talk directly 'realtime' to friends on the Internet.

NETINFO
NetInfo is a cool tool for analysing the network and the people connected to it - 'finger' your friends to see if they are online, 'ping' servers to find the response speed.

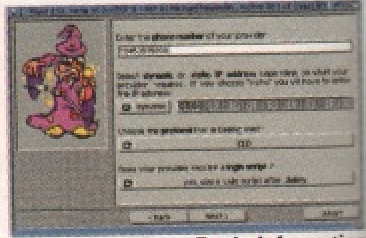
X-ARC
X-Arc is the Amiga's answer to WinZIP™ - automatically decode LHA/LZX/ZIP files, edit the contents of these archives, create your own archives. Full integrates with NetConnect v2!

NetConnect v2 is a state-of-the-art Internet package aimed towards Amiga users wanting to connect for the first time (absolute Internet beginners), those who have been connected a few months (novices) and now, due to the keyfile nature of the software, is suitable for advanced Internet users who want to use the modules contained within NetConnect with their existing TCP stack. **NetConnect v2 enhancements include:**

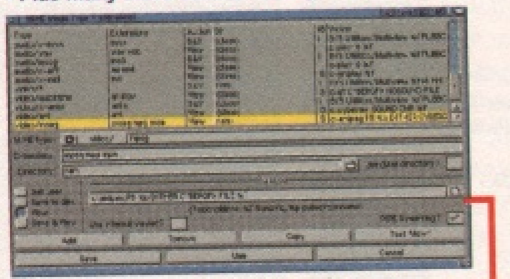
- **AmiTCP-Genesis** - NetConnect v2 users will be the first people to use this new TCP stack! Based on AmiTCP Pro, we have added a number of changes - the main additions are the new Wizard, MUI based dialler, multi-user support, 'events' control, status window (time on 'net, connection speed), new prefs.
- **Setup Wizard** - makes configuring your ISP a doddle. Choose your modem, enter some user details and then the rest of the process is completely automatic! This is true Windows95™/Mac OS 8™ style connectivity! See the example pictures - point and click Internet configuration!
- **New programs** - AmTalk, NetInfo and X-Arc (a brand new WinZIP™ style archive management tool. Downloads lha/lzx/zip files from Voyager etc, auto-extracts them into X-Arc's GUI and allows you to control the files).
- **MIME Prefs** - Central MIME prefs interface means that you only need to setup file types once with one nice interface! This saves masses of time and effort (esp. for beginners).
- **Octopus** - Octopus is a new dock bar creator (based on the original NetConnect bar) which allows you to create multiple dock bars with point and click ease - just drag the icons you have created into the icon bar! This new version supports 'animated' icons, the ability to launch another bar from an icon and to create background colours for icon. NetConnect v2 is pre-setup with its own icon bar for ease of use.
- **Programs are now keyfile based** (can be used with any TCP stack - Miami etc)
- **Extras pre-configured:** MIME types (CD only), datatypes (CD Only), online help files etc
- **Updated, latest versions of the modules** (Voyager-NG, Microdot-II, AmIRC, AmFTP etc)
- **Printed manual** - install NetConnect and understand the Internet quickly and easily (with advice from NC users!)
- **Plus many more smaller changes and additions**



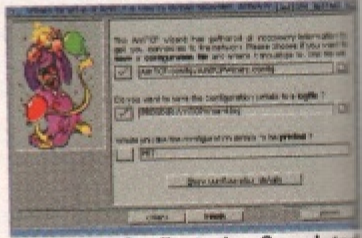
Wizard - Enter Your Information



Wizard - Enter Basic Information



Central MIME Preferences



Wizard - Configuration Completed

NetConnect v2 CD [contains many extras: datatypes, MIME types (for www browsing) and much more]	£52.95
NetConnect v2 Floppy Disks [only contains the core programs & online help documents]	£54.95
NetConnect v2 Upgrade from v1/v1.1 [registered NetConnect v1/v1.1 users only]	£call!

DELIVERY CHARGES

S'Ware	- £1.00 for UK delivery - £1.50 for EU delivery - £2.00 World delivery
H'Ware	- £4 for 2-3 day delivery - £6 for next day delivery - £call for Saturday delivery

Make cheques/P.O.'s payable to **Active Technology** and send to the address listed opposite. We can accept credit or debit card orders. For any additional information call us ASAP!

WANT MORE INFORMATION?

We provide an *new* information pack (Internet Informer iss.2) covering NetConnect and the modules (Voyager, MD-2 etc), the modems we offer, connectivity discounts and a set of frequently asked questions and answers. Internet Informer iss.2 also gives information about the Internet, why you should connect etc!

You can also access the NetConnect homepage for additional information, latest news and to download a time-limited demo version of the software:

http://amigaworld.com/netconnect

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NEW PHONE NUMBER! Tel: 01325 460116 E-Mail: active@enterprise.net

Fax: 01325 460117

Latest Technology Modems

K56Flex modems are here! Download software and web pages **upto** twice the speed of a 28.8 modem. 56k modems will operate at 33.6K speeds for uploading but you can cut your phone bills drastically when using the 56K technology! Isn't it about time you upgraded that 14.4 or 28.8 modem? For further information about the new K56Flex (Rockwell developed) technology contact us!

We only supply quality **branded** modems (Dynalink UK Ltd or Diamond SupraExpress), which may cost slightly more than their unbranded competitors, but they ship with a 5 year warranty, the knowledge that a UK company offers support/information and you are buying a modem with quality (Rockwell based) components.

K56Flex modems need to connect to another K56Flex modem in order to use 56K technology (make sure your provider supports K56Flex technology). Call for further technical details.

33.6k External Data/Fax/Voice



£79.95

- Quality branded Dynalink or Supra modem
- 33600 bps DATA/FAX/VOICE modem - true v34. Throughput to 115,200 (230,400 for K56Flex) BPS via V.42 bis data compression
- Group 1, 2 & 3 send/receive FAX (14.4)
- Voice Commands - DSVD upgradeable (by software)
- V.80 (video conferencing) capable
- Call Discrimination
- Fax on demand
- Caller ID and Distinctive Ring enabled
- Simultaneous voice and data (S.V.D.)
- Speakerphone for hands-free operation
- Upgradable ROM chip
- Includes headphones/microphones - for voice control
- 5 year warranty
- Serial cable included

56k External Data/Fax/Voice

Specs. as the 33.6k external with some general information:

The top of the range Dynalink 56Flex makes sophisticated communications more affordable and easier to use than ever before. With full-duplex speakerphone, voice mail and free head/microphones you can now use a single phone line for all your communications - voice, fax, and file transfer. The main advantage of a K56Flex modem is crystal clear voice recording (via STFax Pro), faster downloads (making the Internet work faster for you) and the latest comms technology.



£109.95



£149.95

- 56/64/112/128 Kbps connections
- Voice/data on both B-channels
- Caller ID enabled (where available)
- AutoISDN® application
- Analog Support: Rings up to 3 telephones
- User-assigned distinctive ringing
- Multilink-PPP
- Flex Channel Bandwidth-on-demand
- PAP/CHAP authentication

External ISDN

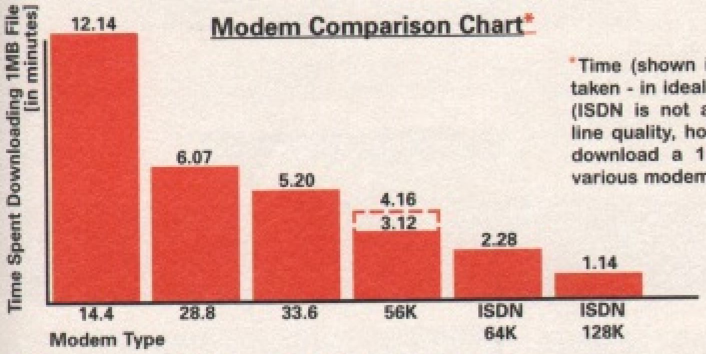
Tired of waiting for your modem to download a favourite Web page or retrieve large files? Imagine surfing the Net at a rock solid digital 128,000 bps connection with a Dynalink ISDN terminal adaptor, or nearly five times the speed of a 33.6 Kbps analogue modem. With an analogue port to ring standard telephones, fax machines or modems, the Dynalink ISDN has been designed to be the easiest and most cost-effective route to high-speed access to the Internet and remote LANs.

ISDN works on your standard Amiga in conjunction with a Hypercom or other high-speed serial card and Genesis, NetConnect or Miami. You also need an ISDN line installed to use an ISDN adaptor. **Please note**: ISDN adaptors cannot be used directly as fax machines, you would need a cheap analogue modem to handle this (which connects to the ISDN TA).

Choosing Your Modem

The graph below should help you choose the modem for your needs. For the price, a 33.6K modem is best value for money as a serial card is not absolutely necessary. A 56K modem is a good option for those wanting maximum speed but have a limited budget (the red bar shows the maximum connection speed - as most '56K' modems connect around 44-48K the extended bar shows the 'realistic' connection). You need a serial card with a 56K modem. For the true 'net surfer, ISDN is the ultimate option - solid 64/128K connections, constant speeds but higher running costs. Note that transfer rates with analogue modems can vary depending on factors such as line quality. Call for further information!

Modem Comparison Chart*



*Time (shown in minutes) taken - in ideal conditions (ISDN is not affected by line quality, however) - to download a 1MB file by various modems.

Various Modem Pack Options

Various money saving packs are available. These are all based on either the 33.6k, 56k or ISDN modem plus a collection of extras. Call us for other pack options if you have your own pack idea!

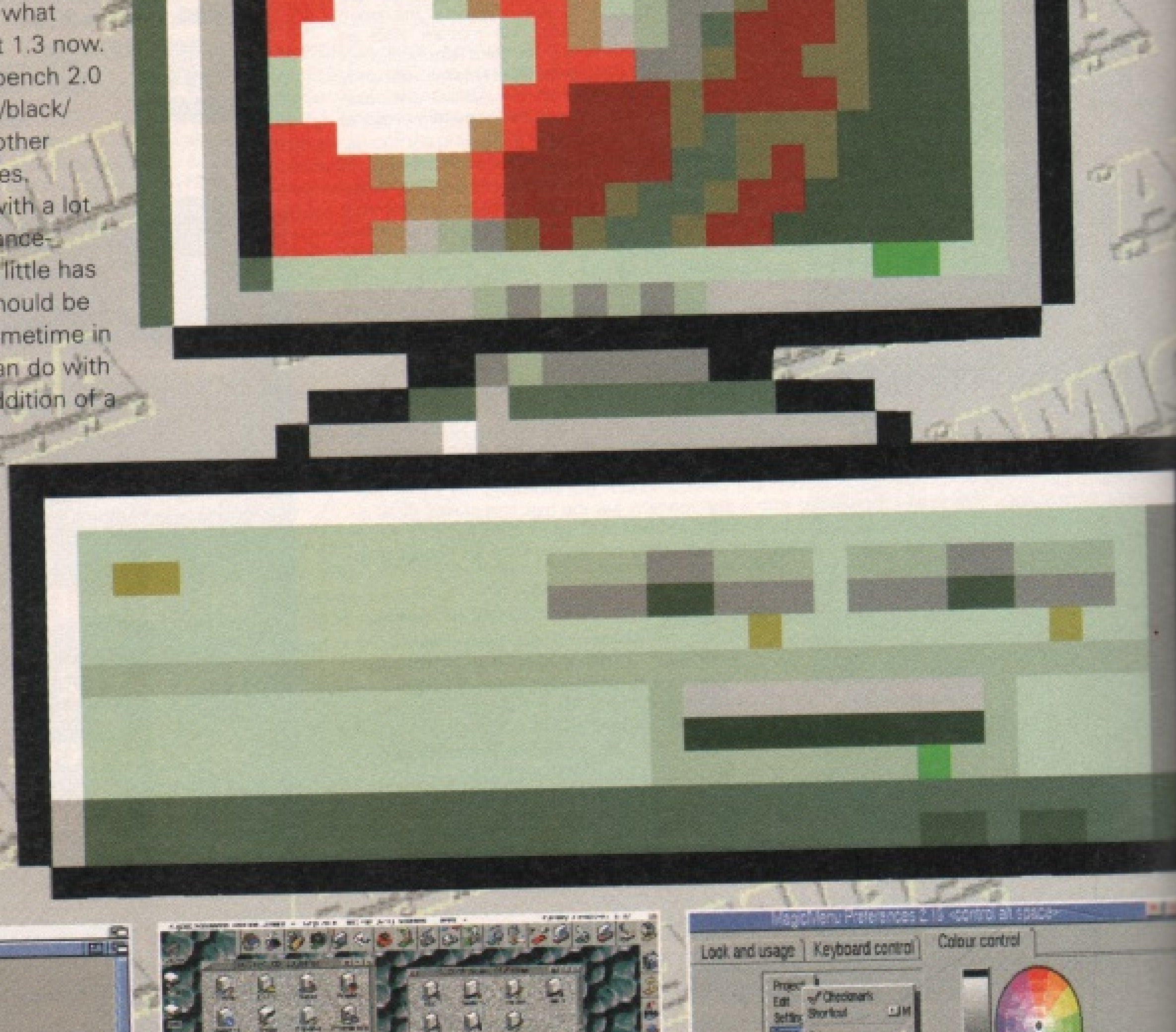
CODE	PACK CONTENTS	PRICES £
PK01	33.6 Modem & STFax	£ 89.95
PK02	33.6 Modem & NetConnect	£109.95
PK03	33.6 Modem & NetConnect & STFax	£119.95
PK04	33.6 Modem & NetConnect & Hypercom1 & STFax	£149.95
PK05	33.6 Modem & NetConnect & Hypercom3Z & STFax	£159.95

ADD £25 for a 56k Modem (instead of the 33.6k model)
ADD £55 for an ISDN Modem (instead of the 33.6k model)

- All packs come with one month free connection to a major Internet Service Provider
- Other options may be available - call
- Choose between the CD or Floppy disk version of NetConnect with your modem pack
- STFax Professional will be despatched on release

Workbench 2000

Don't wait for Amiga International to release a new Workbench, revolutionise it yourself with the help of the ultimate Workbench enhancement pack on this month's CD!



When the Amiga first came out, Workbench was really quite revolutionary, despite what people may say about 1.3 now. In 1989 we got Workbench 2.0 with its more restrained white/grey/black/ blue colour scheme and a host of other improvements, such as commodities.

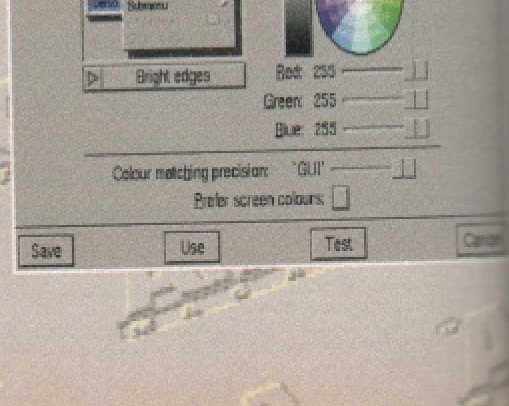
Finally Workbench 3.0 arrived, with a lot more colours and a few other enhancements. That was in 1992, and very little has happened since. Workbench 3.5 should be released by Amiga International sometime in 1998, but there's a lot more you can do with the current Workbench with the addition of a few well chosen programs to your WBStartup drawer.

This article will show one of the possible routes to building the "Ultimate Workbench". This will enhance both the appearance and abilities of Workbench, making using your Amiga an even more pleasant experience. All of the programs mentioned here are on this month's cover CD, in the CUCD/Magazine/UltimateWB drawer.

▼ **Left to right... Before: the lowly grey and blue... After: fully tooled up and ready for action. Spruce things up with MagicMenu.**







ToolsDaemon

While you can add items to the single Workbench Tools menu, this is very limited. ToolsDaemon allows you to create as many new menus as will fit on your screen. You can have separate menus for utilities, games, internet, prefs programs and so on. ToolsDaemon adds its own preferences program to the Tools menu, and from here you can add as many menu items as you want.
The preferences editor uses drag and drop, just drop a program icon onto the window and it will be added to the menus. I have all my preferences programs available from a single menu, which I created by dropping each icon from my preferences drawer onto the window. Combined with Magic Menu to alter the way the menus work, you can have a very powerful menu system.

Patches, hacks and kludges

The Amiga has always been a computer the user can customise to their own preferences, so the operating system lets programs alter standard system functions. The "patches" mean that it is possible to alter or upgrade specific functions without having to upgrade the Kickstart chips. Some people consider this behaviour system-unfriendly, but this is exactly what the SetPatch program supplied with Workbench does, and the reason the system was designed to make this possible.

You can have conflicts where more than one program attempts to patch the same function, so it is wise to install Workbench enhancements one at a time. Make sure you have one working just as you want it to before trying another. this also makes it easier to go back to your old setup if you decide to. The different definitions are:
Patch: A program you like that alters the operating system. Hack: A program you don't like that alters the operating system. Kludge: Somewhere in between

Looking good

Anyone who,spends a lot of time using their computer will agree that a pleasant working environment is important, and there is quite a lot you can do about this with the standard Workbench software. Using the system preferences programs Font, Screenmode and WBPattern, you can alter the basic appearance of Workbench to suit your taste. However, there are some points to consider.

Running a large 256 colour AGA screen will slow down your Amiga, even if it has a fast processor, and using a large backdrop picture can use lots of Chip RAM. Last month's CUCD contained plenty of backdrop pictures and patterns. With an AGA screen you are probably best off with no more than 64 colours on your Workbench, and a fairly small pattern with no more than 32 colours, leaving the other colours free for Workbench and other programs.

If you have a graphics card, these limitations no longer apply, so a 256 colour Workbench is entirely practical. Both CyberGraphX and Picasso 96 allow you to run Workbench in even higher depths, with 64,000 or 16 million colour screens possible.

Icons

One serious,limitation of the Amiga's icon system is that there is no way of including colour information in an icon. If your palette is different from the icon designer's, the icon will look odd on your Workbench.

The solution is NewIcons, which extends the icon system to allow the icon creator to specify individual colours. If an element of the icon is suppose to be dark red, it will be displayed in dark red, or the closest available colour. This is why we use NewIcons on the CU Amiga CDs.

Commodities

Almost since the Amiga was released, programmers have been writing additions and modifications to its operating system. At first these used fairly system-unfriendly methods of "hooking" into the operating system, so Commodore introduced commodities.

Now Aminet contains hundreds of commodities to enhance your Workbench. Running lots of small commodities can be a nightmare when you want to alter the way they work and interact, so programmers came up with the idea of a multi-function commodity, one program to handle a number of different patches and actions. The most comprehensive of these is MCP (Master Control Program), and best of all, it's totally free.

All the author asks by way of registration is that you let him know you are using it. As MCP incorporates so many different functions, installing and using it is covered in a separate section. You will be able to add so many useful functions to your Amiga that it will be at least a couple of days before you come back to read on from here.

The King of shell enhancements

Although the title is Ultimate Workbench, the shell is an important part of using the Amiga. Many things can be done better in the shell than in Workbench, but it can often be a bit of a pain to use.

Typing in long path and file names, only to find it's failed because of a minor typing error is enough to put anyone off. Isn't it easier to type the first few characters and let the shell complete the name for you, or to be able to drop an icon onto the shell window and have its full name appear at the cursor position?

That's what David Larsson thought, so he wrote KingCON. He also added many other useful features, such as scroll bars and the ability to save the contents of the shell window to a file.

Visual Prefs

VisualPrefs allows you to alter the appearance of just about every system gadget. Its preferences editor shows a sample display, updated in real time, so you can see exactly what each change does. It may not make your Workbench any faster or efficient, but it does make it yours.

Where did I put that file?

A useful feature of other operating systems is a file finder, something the Amiga never had as standard. Finding a file if you don't know its exact name and location can be a laborious process, but aren't computers supposed to save us from all that tedious stuff?

With a name like SimpleFind you would expect this program to be easy to use, and you would be right. You may also expect it to be fairly basic, but it isn't. Not only will it find files anywhere on a hard drive, Zip disk or CD, You then have the options to copy, delete or display any of the found files. You can even unpack archives, or create a new archive of the selected files.

Fast program starting

KingCON gives you much faster access to files from the shell, but it can still take a lot of mouse clicks to start a program buried several sub-directories deep on your hard drive. Workbench gained an extra menu, the Tools menu, from version 2, but it's not particularly user-friendly, and putting everything in one menu is very limiting.

Enter ToolsDaemon, which allows you to create as many different menus as will fit on your Workbench screen.

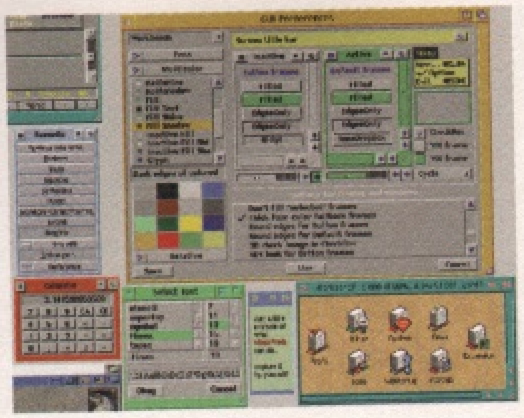
Small, but SO useful

As well as its Finder, there is another feature worth "borrowing" from the Mac, the global

NewIcons

NewIcons is a lot more than an icon collection. It completely changes the way Workbench reads icons, giving a flexibility in icon design that is impossible with the standard icon system.
The installer will install the system files and offer to add the new images to your standard system icons.
You will have to change the others yourself, using the tools provided with NewIcons. There is also an uninstaller provided. There was a massive collection of icons provided on last months cover CD. NewIcons is used as the default setup for all the CU Amiga CDs, since the icons look as close to their intended appearance as possible, whatever Workbench palette you use.

▶ Did you know you can even totally change the way your windows look?



trashcan. Instead of having to look for the trashcan icon in the root directory of the current partition, you have a trashcan icon on the Workbench. GlobalTrash gives you exactly this. Any files dropped onto it are moved to the trashcan of whichever partition they are on, creating the trashcan directory if it doesn't exist. You can set it to show different icon images depending on whether the trashcans are empty or not, and double clicking on the icon gives you options to view the contents of the trashcans and empty one or all of them. You can also use it to eject Zip disk or CDs by dropping the disk icon onto the trashcan.

There are two more, very small, additions that make a big difference to Workbench. The first is FastExec, which relocates exec.library to the fastest available memory. If you have an accelerator card, this may make a significant speedup to some Workbench operations. The other one is a newcomer called PowerWB. This adds a couple of icons to each window's title bar to switch the view modes between View by Icon/Name and Show All/Only Icons.

It also adds keyboard shortcuts for these and several other icon operations.

Will that be all?

Adding NewIcons, MCP, KingCON, ToolsDaemon, SimpleFind, PowerWB, GlobalTrash and FastExec to your startup will transform your Workbench into something so much more efficient, faster and easier to use. However, it doesn't stop there. Before you start adding all sorts of enhancements to your startup, you need to consider the load on your machine. Most of these programs use very little processing power, but each one you load consumes a little more precious memory.

If you have 6MB or less of memory, you should think very hard about adding anything more than these. There's no point in having an attractive and easy to use system, if you don't have enough memory left to run programs effectively. For those with some memory to spare, here are some further enhancements.

One of the reasons for having more memory is to be able to multitask more easily, yet having more than one program running can make you Amiga seem sluggish. Unix computers have long had task schedulers, programs that adjust the priorities of other programs to make the best use of available processor power. The Amiga has

SimpleFind

SimpleFind is like that wood varnish you see advertised on the TV, it does exactly what it says. It finds files and is simple to use. Type look in part of the filename you are looking for and select the directories or drives to search from a requester (or press ALL) and off it goes rummaging through your hard drive before presenting you with a list of files it has found.

You can then view, copy, delete or unarchive some or all of the files found. This should be one of the first programs you allocate a hotkey in MCP, so it's immediately available whenever you want it.

KingCON

KingCON adds a wide range of facilities to the standard CON: window, as used by the shell and other programs. It has a history buffer, with scroll bars on the window, so you can now read directory listing etc. much more easily.

You can save the contents of the buffer, you can iconify the shell while it is executing a command and it will open again when it's finished, and you can drop icons onto the window for the full name and path to appear at the cursor position. But the most useful feature is filename completion. Type the first few characters of the file or directory and press tab, KingCON will either complete the name for you, or give you a list of possible matches to choose from.

I asked readers on the CU Amiga internet mailing list for a list of their favourite Workbench enhancements, KingCON featured in just about every reply. Once you've used it you will NEVER go back.

Executive

Put simply Executive helps multitasking programs to get on better with each other. You can specify whether a program gets a larger or smaller share of the available processing power.

This is useful for running CPU intensive background tasks, like rendering or image processing, yet still having a responsive Workbench. It comes with a range of programs for monitoring and handling all the tasks running on your machine, but even the basic setup as first installed will make multitasking much smoother. Executive is one of those programs that you quickly take for granted. You don't realise how much it improves things until you stop it.

MCP

MCP, short for Master Control Program, must be the ultimate package deal.

It takes a large number of system patches and enhancements that were available from a variety of other programs and combines them into a single package, adding a few of its own too. Meaning you can control everything from a single preferences program, and running all the functions from a single program should reduce memory usage too.

Installing MCP is done with the provided installer script and you can then start setting up the various functions. With so many options to experiment with, it can be easy to get carried away, so we have compiled a list of the most useful functions as a starting point. It is important to remember that patching any operating system functions carries a slight risk, especially if two programs try to patch the same function, but the features listed here are the safer options.

Some of the other options can cause problems on some machines. So sort out a basic setup and then change things one at a time. That way you will know what works and doesn't work on your Amiga.

These are the options you really should look at first:

ALERT-HISTORY, ALERT-TIMEOUT and NOGURU

This replaces the normal "Guru" requesters with a more informative one, and writes the message to a file. It makes it easier to work out what is causing the errors. Since it delays the reset process, it also reduces the chances of a disk becoming invalidated by a Guru reset while writing to the disk.

APPCHANGE

Many programs put AppIcons on the Workbench, and most of them allow you to change the image used for the icon. However some programs hard-code the image so you can't change it. This feature will change the AppIcon images for all programs.

ASSIGNPREFS

You can now remove all those Assign statements from your user-startup and manage them all from a single preferences window. Not only does this make it a lot easier to alter anything, it speeds up booting since all the assigns are set with a single command, instead of a separate assign statement for each one.

ASSIGNWEDGE

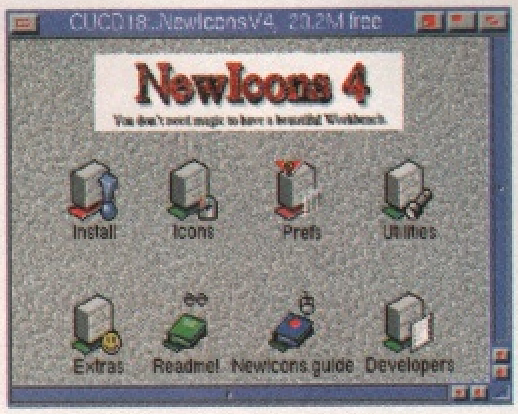
How often do you get a requester saying "Please insert volume XYZ:" in any drive? Many program installers add assign statements to user-startup, but if you only want to try it out before installing it,

ARQ

ARQ enhances requester in three ways, they open in the centre of the screen, they are much more attractive with an animated image relevant to the type of requester, and they have more keyboard shortcuts, Return of OK, and Esc for Cancel. If a requester has several buttons, they are mapped to the function keys, F1 for the leftmost and so on.

Easy does it

There are a lot of programs listed here, most of them with many options. You may be tempted to try to install and set them all up at the same time... this is not a good idea. Try each program individually, read the documentation, install and configure it as the manual says. When you have it working as you like, then move on to installing the next one.



◀ **The NewIcons system takes your old Amiga icons and replaces them with bold, vibrant new ones.**

one too, Executive. With Executive you can allocate relative priorities to different tasks to make the best use of your processor. For example, you can set your 3D rendering program to "give way" to everything else.

Design your own Workbench

The look of the Workbench windows and gadgets hasn't changed for several years. MCP's Sysihack function allows some changes, but if you want to customise your Workbench (and other) windows even more, try VisualPrefs. This lets you change most of the standard gadgets, on a screen by screen basis, so any program that runs on its own screen can have a different appearance.

MagicMenu does for menus what VisualPrefs and PowerWB do for windows. not only does it change the appearance of you menus, but it allows you to alter their behaviour. You can have menus popup under the mouse whenever you press the right mouse button, instead of having to move the mouse to the top of the screen. You can have sticky menus that stay on screen until you select something from them and you can control menus from the keyboard.

Since we've now changed the appearance of our menus and windows, how about improving the system requesters too? ARQ alters them to open in the centre of the screen instead of the corner, they now have sensible keyboard shortcuts and the appearance is greatly improved.

One of the unique features of the Amiga's Intuition is multiple sliding screens. Instead of having all your programs opening their windows on Workbench, each one can have its own screen, making for a much tidier working arrangement. But finding the screen you want when you have several open can be tiresome. MCP's ScreensMenu feature helps, showing a list of open screens when you click the right mouse button on the screen depth gadget, but flipping screen with the keyboard is no easier.

ScreenTab shows the names of the currently open screens for you to pick the one you want, all from a hotkey. It also gives you a taskbar and StartMenu to launch commonly used programs. Once you've installed all these programs into WBStartup, you can experiment with turning them on and off.

There are several programs available for controlling what happens with WBStartup when you reboot, but WBSM is my favourite. Normally nothing happens, but if you hold the left muse button down during bootup, a window opens with the contents of WBStart, so you can disable or enable individual programs. ■

Neil Bothwick

this can be a real pain. This function extends the requester with options to create the assign immediately, or to try and mount the required drive.

AUTOMOUNT

If you have devices in your Storage/DOSDrivers directory that you only mount when needed, maybe because you only use them rarely, this function is for you. Before the "Please insert volume... " requester can appear, it is automatically mounted.

CACHEFONT

Opening a font requester from any program can be a slow process if you have a large number of fonts available. The system has to scan your FONTS: directory each time. CacheFont builds and saves a list of all your fonts, and passes it to any program that opens the font requester.

COPYMEMQUICK

A patch to speed up memory usage.

CYCLETOMENU

This one turns standard cycle gadgets into drop down menus, which are much quicker to use when the gadget has a lot of choices, and let you see all the choices at once.

HOTKEYS

Hotkeys are keypress and mousebutton combinations that have the same action wherever you use them, whether in an application, on Workbench or in a shell.

They provide very fast shortcuts to frequently used functions. The classic uses are to open a shell, or to arrange windows and screens. Double-clicking on any part of a window to bring it to the front when its depth gadget is hidden is much faster than clicking on the depth gadgets of all the windows in front of it.

Since you may be spending some time experimenting with the various options in MCP, one of the first hotkeys you should setup is to one load MCPPrefs.

MOUSE-SPEEDER

A mouse accelerator. There is one built into the Workbench Input preferences program, but this one is far more flexible.

NEWEDIT

Adds more control to string gadgets, you can copy and paste via the clipboard and do much more.

PATCHMATH, PATCHOPENWB and PATCHRGB32

These patch certain system functions to correct errors in the originals.

SCREENMANAGER

A screenmode promoter. This is of most interest to users of graphics cards, and saves running a separate promotor program. However there are uses for all Amigas. Anyone who tried to run the FPU version of DrawStudioLite direct from the CUCD will have got an error message, due to a configuration file containing a Picasso96 screenmode.

A screenmode promoter like ScreenManager allows you to force it to use a standard AGA or ECS screenmode.

SCREENSMENU

Turns the screen depth gadget into a menu. Press the right mouse button over it and you will see a list of the available screens. Much quicker than cycling through, hunting for the one you want.

SNAP

Once again, this is a feature made popular by other programs that is now integrated into MCP. Snapping is copying and pasting text from one window into another, via the clipboard.

This is extremely useful with programs that do not have direct clipboard support.

TOOLALIAS

How often have you double-clicked on an icon, only to be told "Could not open your tool xxx"? Programs often create icons for files that use themselves as the default tool, but you don't want to open a full paint package or word processor just to view a picture or text file.

With Toolalias you can replace calls to these programs with something you prefer, such as Multiview or your favourite graphic viewer.

ScreenScene

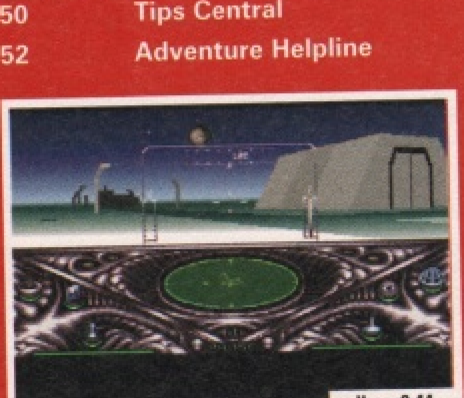
The anticipation has been getting worse and worse by the month. We've been seeing all sorts of fantastic looking games announced, but releases have been slow. At last it's all starting to happen, and this month we take a look at Shadow of the Third Moon, the Voxel flight sim. Does it live up to the hype? **Turn to page 48 right now!**

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Köln Show

Computer '97 in Köln was more about hardware than games, but the implication for gamers was enormous. We take a look at why...

These days it is considered that an Amiga game is doing pretty well if it sells a few thousand. It came as something of a surprise to learn that one particular game sold just under 750 copies in the first three days of its release at the Cologne show. That game was Shadow of the Third Moon, a genuinely high end Amiga title. There are a lot of people moving into high specification Amiga games publishing, and the truth is that every single on of them is nervous about it. They all recognise that if the Amiga is going to have a future, people are going to have to upgrade their machines, and a very good way of convincing people to upgrade their machines is to show them how good games would be if they did. This is fairly standard assumption in the PC world, but there is a bit of a difference for the Amiga games houses.

If you pitch a title too high, you lose sales. For a company selling into a large market like the PC, it can be worth doing because it helps up the average specification of the machines they are writing for, it makes them look good 'cos they've released a fantastic game, and there are so many people out there that the lost sales from low end users isn't so important. On the other hand Amiga publishers need to maximise their number of sales because the bitter truth is that there aren't nearly so many people buying Amiga games. If someone releases a game that is too high specification, they run the risk of not selling enough to pay for the costs of releasing it, yet alone making the kind of profit on it which is necessary for making a living out of the work put in.

Many publishers will, I guess, take heart in the relative success of Shadow of the Third Moon. Given that there was never an off the shelf Amiga sold that could run this AGA or better, 68030 minimum, 5Mb RAM, CD-ROM and hard drive only game, this is a game only those who've expanded their machines will be capable of running. So why did it sell so many? I think the answer is simple. Those specifications are no longer all that high.



What's next?

There are some pretty exciting games on their way... but we are tired of telling you about them so we thought we'd just let you have a quick butchers' instead.



Genetic Species from Vulcan Software. This stunning looking Wolfenstien 3D on steroids is due out in February of 1998... but wasn't out at the show.

Active Amiga users seriously interested in gaming are going to have an accelerator, a CD-ROM drive and so on. When users like that see a game designed for an unexpanded A1200, they aren't too likely to get excited, whereas something like TSOTTM which uses the power of their machines to the full comes along, things are different. Visitors to the Titan Computer stand could see for themselves what kind of a game was on offer.

Elsewhere at the show there was not a lot by way of new titles. Aurora works of Canada were showing off their high end title H-Bomb, which is an attempt to upgrade classic 80's gameplay with 90's sound and graphics. Fellow Canadians ClickBOOM were hoped to show up with MYST, but the game overshot by a couple of days. Vulcan had a showreel of titles at the Amiga stand, showing graphics from forthcoming titles such as HellPigs, but could have done a lot better by having, for instance, a fully playable version of Genetic Species on display. New Generation software were there with the demo of Trapped 3 (which they kindly allowed us to put on this month's cover disk!) and were also showing off a PC title they are hoping to have in an Amiga version of this spring - Wet, an erotic comedy game (!). Titan had the really rather nice looking platform game Sword on display alongside TSOTTM, which we have for review next month. They also announced a few other titles expected soon, including Evil's Doom CD, an updated and improved commercial release of the excellent Shareware RPG, a spaceopera ./ strategy game called Last Days of Paradise, and a game called Total Combustion PPC, which is a Carmageddon style game for 68040 minimum and PowerPC preferred. As well as all this, old hands such as Islona / APC&TCP were there.

Perhaps the most important thing as far as gamers were concerned is the news that 3D graphics acceleration is heading towards the Amiga. Micronik debuted their new PCI capable Amigas which could, in theory, use the Voodoo 3DFX cards which the most high end PC games are designed for, and the phase5 PowerUp project has spawned a plug in graphics card which would give an Amiga more raw games playing power than any current would possibly need. See page 70 for more on this development.



Sword, from Titan Computer / Seriocomic. Classic platform action with lovely graphics. See next month for a full review of this new game.



Forgotten Forever, From Charm Design



Explorer 2260 from World Foundry / Vulcan



Foundation, from Paul Burkey / Sadeness



Hard Target, from Vulcan

Ultimate Gloom

■ **Price: £14.95** ■ **Publisher: Guildhall Leisure ✆ 01302 890000**

Gloom's back, and this time it's on CD! Time to rekindle the blood-lust and get yomping down those dark corridors...

Never one to be impressed by an endless list of spells and plot about evil wizards, runes and all that kind of stuff, the all out action approach of Gloom got me instantly hooked. Now the reins have been handed over to Gareth Murfin for the third, and according to the title, the final installement in the series.

As is increasingly common these days, Ultimate Gloom is a CD-only release. Not only do you get the new Gloom 3 on the disc, but you're also given the original Gloom and Gloom Deluxe too. There's also a bunch of new levels from the general public made up with the Gloom editor (which is included also). Quite a package all told then.

It's par for the course that CD games come with flashy intros, normally pre-rendered 3D sequences and a soundtrack. Ultimate Gloom makes a comically bad attempt at setting the scene with a narrated introduction which comes complete with scrolling subtitles and a zombie picture. The voice over sounds like it was recorded in a biscuit tin by a depressed Geordie, then slowed down to half speed to sound scary. Nice try guys.

What's the difference?

If you were hoping for a stream of technical advances since the last edition you'll be disappointed. However, the main game engine is significantly faster with options to play different versions optimised for 020, 030, 040 and 060 CPUs. Specifically the speed increase you'll get is 26% (020), 14% (030), 60% (040) and 3% (060). Unlike Trapped 3 though, you won't be bombarded with fancy lighting effects as your plasma bolts hurtle down corridors, and neither will you see any texture-mapped polygon enemies. Why? Mainly because speed is an essential ingredient in any decent shoot 'em up, and at the end of the day that's what Gloom is.



▲ The title screens are better this time round.

So that's the advances out of the way. Disappointingly, most of the other changes are for the worse. The first thing that hits you (after the improved intro screens) is the amateur look of the graphics. The first level texture maps are very poor. The ground is plain tiled lino and half of the walls have little more than a coarsely stippled colour graduation for detail. This is an unfortunate choice as the scaling of the textures clashes with the dithering as you approach the walls.

Worse still, all the enemies you come across appear to be on casters – they just slide around the place with barely an animation frame between them. If the developers weren't going to bother animating the enemy sprites properly they should have at least given themselves and excuse for it – switching the soldiers for Daleks would have done the trick. Maybe the following levels could have pitted you against mutant arm chairs and angry skateboards. Then again maybe they should have just bothered to animate them properly.

You'll see they've obviously put a lot of work into drawing a highly realistic gun that pokes up in front of you throughout the game. Or is it a hotdog? The sound effects are another disappointment. The satisfying 'splat' of exploding zombies is still present but the main gunshot sound has graced a million and one PD games over the years and is surely due for retirement by now.



▲ **Don't look now, but there's a blue marine sliding towards you! He must have some of those new hover boots.**

Gloom on a rope

Despite all of this, it's still Gloom. The opportunity to go shooting off your plasma gun around a whole new set of levels is not to be sniffed at. The two-player mode is still here and it's still just as good fun to double up and play with a mate.

As with Gloom Deluxe, you can choose to run a few different versions of the game to get the best from your system. The display options are 'Gloom 3 Ze Dc' (which the documentation warns against useing as it will crash – good job they put that in then), 'Gloom 3 Ze' for general use, 'Gloom on a screen' which allows you to select any available screen mode (such as a CybergraphX or Multiscan display), 'Gloom in a window' to play in a window on Workbench and 'Gloom iGlasses' which offers a real 3D display if you have some of those 3D glasses Escom were trying to flog a while ago.

I was interested in seeing how it went on a CybergraphX display with an 060, but the set-up program crashed on the CybergraphX test machine. Never mind.

The best bit

It's ironic that the best bits of this CD are the two previous Gloom games. They both knock Gloom 3 for six. If you don't have either of them, then this is a good opportunity to get all Gloomed up, especially considering the knock-down price. Most of the score here is for those games. Had it been Gloom 3 on its own you'd be looking at something nearer 70%, but the overall package amounts to a decent re-release. ■

Tony Horgan

ULTIMATE GLOOM

■ Workbench version ......2+	Graphics 78%
■ Number of disks..........CD	Sound........ 50%
■ RAM..........2Mb	Lastability........ 78%
■ Hard disk installable ...Yes	Playability........ 83%

OVERALL

Disappointing third installment but the originals still cut it

80%

Uropa 2

■ Price: £29.99 ■ Publisher: Vulcan Software ✆ 01705 670269

Vulcan step into the future with this space adventure from Austex. Recent Vulcan releases have not been critically acclaimed – will this game see them back on track?





▶ **Right: The polish and professionalism is all there, with nice intro sequences and all. In-game graphics (inset) are rather less impressive.**

Uropa2, put in its most basic terms, is a supercharged blend of Impossible Mission and Battlezone, set against a sci-fi backdrop with a lot of chrome. Vulcan Software's second foray into the world of CD-ROM gaming promises an epic of exploration, discovery, adventure, and action. That's a lot to promise and it's no secret that Vulcan's track record has been somewhat spotty. The company has published some very clever titles, but these rarely aspired to be anything more than, well, derivative – the likes of Hillsea Lido and Timekeepers. Some of the company's more recent offerings have met with the ire of reviewers. Along comes Austex Software, developers of Uropa2, to attempt to rescue Vulcan from this slump.

Rescue it is!

Funny that I mentioned rescue, because that's much of what this game is about. It's the future and mankind has spread beyond the Earth, making the cold moon Europa one of its primary bases. To help with the hard work needed to maintain an interplanetary empire, humans have developed two 'races' of intelligent robots to help do the work: Tekites and Kapones. It seems, though, that the Kapones have grown tired of their role as third-class citizens.

They've teamed up with some alien enemies of Earth and have seized control of the Uropa2 colony. As a Tekite in the special Centurions strike force, you are sent on ten successive missions to break the Kapone stranglehold on Uropa2 and free the colony. Not to mention showing those aliens that humans and their robot lackeys are not to be messed with.

The game is played out in two settings. The first is in a 3D isometric world of interconnecting rooms of the colony, ranging from hallways to living quarters to research labs. In most rooms there will be items to interact with – shelves and cabinets to search (the shades of Impossible Mission here, complete with the "searching" wait bar), computer terminals to read clues from, and special items such as lab equipment whose ultimate purpose may be hidden at first. There are also humans – the hostages on Uropa2 who you are charged with rescuing. They're useless most of the time, move slowly and get in the way. They also tend to walk right in to hostile situations.

That's right, it's not all just an easter egg hunt. The Kapones have their operatives stationed around the base, and they'll shoot you on sight. Trying to defeat them with the measly "laser sword" you start the game with is difficult enough, keeping the humans from walking directly into the line of fire is even harder. But, no game of this sort would be complete without some sort of powerup, and true to form you can gather weaponry enhancements and various gadgets to make destroying the enemy easier. There's even the old "weaponry vending machine" concept you might recall from Alien Breed and a host of other games – because goodness knows, you want to send your crack commandos into hostile situations lightly armed and low on cash.

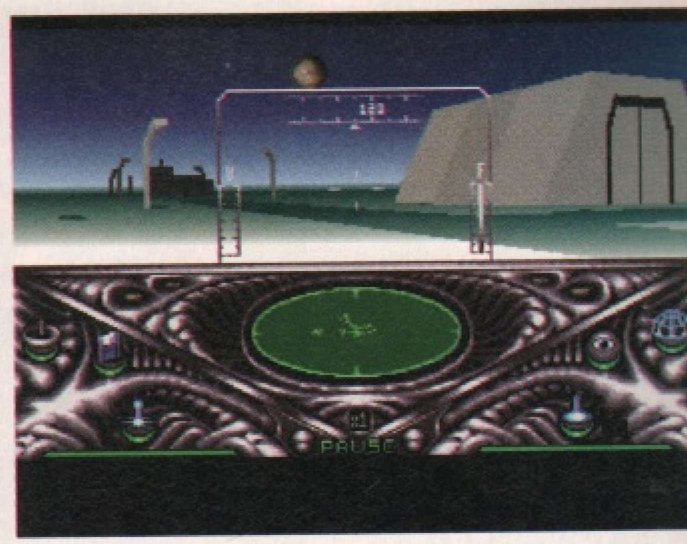
The bases are equipped with transporters that can zap you between a limited number of locations, but sometimes you have to take the mission on the road. This is the second stage of the game, where you board a "Hovar" craft and set out across the surface of Uropa. On the surface, you can travel between buildings, pick up yet more powerups and curiosities, and mix it up with





▲ **Here we see the 3D sequence in action. The 3D is totally faked, but it is fast and furious and looks quite nice.**







◀ The graphics come in a variety of styles and forms, but show an impressively persuasive Science Fiction feel. Apart from the pool table at any rate.



Kapone flyboys who send an endless stream of taunts at you as you dogfight at high speeds on the surface. The 3D hovar sequence engine is fairly smooth and detailed – you won't mistake it for Frontier any time soon but it does the job.

Of the two, it's the less inspired setting for the game, but it allows for two serial linked Amigas to play deathmatches, so it can't be all that bad. On the other hand, in later missions it becomes necessary to launch massive strikes against Kapone bases rather than the discreet surgical insertions of your Tekite droid, and nothing is more rewarding than blowing up a polygon building and turning it into lots of little polygons!

Atmosphere on Uropa

Austex and Vulcan have gone through considerable effort fleshing Uropa2 out into a real experience. The 3D intro, while somewhat grainy and not of award-winning calibre, has a voiceover that sets the mood quite nicely. Virtually all of the text you'll encounter in the game is played back as speech, and the mission descriptions are similarly dictated to you. The overlapping distress signal you hear early in the first mission is particularly disturbing. In both the station and the hovar views, the game automatically maps your location and where you've been (and has information on locations you haven't yet been to in the hovar view).

The game can be played in both ECS and AGA, although the differences are not staggering – you'll notice some extra dithering and a little less chrome in the ECS version. I was surprised because the AGA version didn't seem to be lacking a lot in color – it is slightly cartoonish, but still effective. The flip side, of course, is that the AGA version could have been so much more spectacular.

Control issues

If you're going to regain control of Uropa2, you're going to need control over your Tekite.

This is a bit of an adventure. If you so chose, you could drive just about all of the game from keyboard or CD32 joypad, although the former lacks something in the response department and the latter gets really confusing, with all sorts of combinations of buttons to press. I found that the easiest compromise was to use the joystick most of the time, the keyboard when necessary, and the mouse for interacting with the various computer screens in the game. This is something less than ideal, however. Note: Although you can use a CD32 gamepad, the CD32 is not directly supported. You would need an expanded CD32 with hard drive in order to play, and even then the system requirements suggest a 4X speed CD-ROM drive rather than the CD32's 2X.

The game's inventory system can take a little bit of getting used to. Weaponry and items are catalogued separately, and sometimes getting them to work exactly where you want them is a challenge – for example, you can't seem to drop time-delay bombs right next to a door you want to blow up, you have to give it a little room, but it took me a few minutes to actually try that out and be comfortable that it would really work.

The documentation for Uropa2 is on the CD-ROM in AmigaGuide format. This is fine, although the layout is slightly confusing, it seems there was a slight omission or error in a couple of parts (at one point, the manual says it is going to describe six items but in fact only lists four), and has no pictures, which would have been nice in order to give a real overview of the GUI, rather than a descriptive overview. But after a little experimentation, you'll get the general idea. Uropa2 multitasks, so you can check the documentation while your game is on pause.

The next epic?

With the ability to save games for later play and the progressive nature of the missions (you can't start #2 until you've finished #1), Uropa2 is a game that requires you to make a commitment if you want to see it through.

Working through the puzzles and blasting through the baddies takes some time, and there are 10 missions to play through. The real question for a game that offers this sort of challenge is: is it worth my time? I would have to give that a qualified yes. The game revels in pulpy science fiction conventions.

Enjoy them. Sometimes the voiceovers go over the top. Laugh with them, not at them. And yes, your Tekite does look rather like a tin can with stubby arms. But that tin can with stubby arms has been charged with a serious mission! ■

Jason Compton

UROPA 2

■ Workbench version 2.0	Graphics 84%
■ Number of disks....CD ROM	Sound.......... 92%
■ RAM..........1.5Mb	Lastability.......... 92%
■ Hard disk installable....Yes	Playability.......... 87%

OVERALL

It won't win the Nebula award, but it's fun.

88%

The Shadow of the Third Moon

■ Price: £24.99 ■ Developers: Black Blade / Titan Computer ■ Distributors: Blittersoft© 01908 261466

An Amiga game which delivers realistic graphics and traditional gameplay... ? Surely not!



▲Shadow of the Third Moon – fast moving voxel landscapes and fast action blasting.

S Readers not too whacked out on brandy infested Christmas pudding will recall that TFX, the flight simulator we gave away with our October issue, was originally slated for release back during the Amiga's heyday, but was dropped when DID realised that it was never going to run as fast as they wanted on an unaccelerated A1200. Now that a reasonably good accelerator such as a 68030/50MHz is commonplace, TFX offers no problems. Similarly, most gamers will have the minimum spec. machine to run The Shadow of the Third Moon – indeed, on a fast '030, it runs very smoothly.

It's a pity TFX wasn't released way back, because it might have been instrumental in encouraging people into buying accelerators, and the Amiga might have advanced technologically to match the demands of games players. It is perhaps even more of a pity that TSOTTM wasn't released a few years ago, because it is damn playable on the kind of hardware which was easily available, if expensive, in the Commodore era. Perhaps if people had seen what an accelerated Amiga was capable of, the Amiga games scene would be a lot healthier than it is now.

I realised that the Amiga was going to lose its dominance as the home computer for gamers was when I saw Novalogic's Commanche on the PC. Using a system called Voxelspace, this helicopter sim sported proper 3D landscapes, with hills to hide behind and canyons to fly down. It showed for the first time that more powerful processors would open the gates to entirely new types of game engine, not just the same things running more smoothly. TSOTTM uses 3Dtis, Black Blade's own voxelspace like system, to generate similar landscapes, but with a smoothness and realism beyond Commanche. What's more it does this on a machine less powerful than the type you needed for Commanche. Let's hope that this is an sign that modern specced Amigas can make their way back onto the gaming map.

Rare species

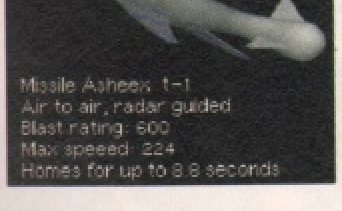
The Shadow of the Third Moon is a member of that oddly rare species, the futuristic flight sim. I suspect that this decision may have been made because the game engine's dreamlike landscapes suit Science Fiction well, lending the scenario a great atmosphere. TSOTTM is set during an alien war.

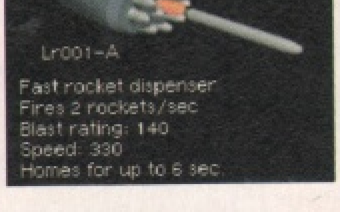
You have the misfortune of serving in the air force during the one of the occasions when your ancient foe, the Keeir, turn up at the gate with a rather unpleasantly large army. You play through a series of 6 campaigns, taking you through various different stages of the war. The first 2 campaigns involve training on the Saxxrat and the Kerjit, the two aircraft you'll have at your disposal.

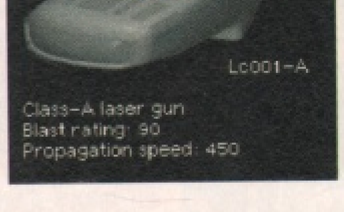
The third level takes you to the start of the war. Through the fourth and fifth campaigns, the war rages around you and your side is having a tough time of it. Finally you fight your way through to Quinrasia and the large sea, and the final battle to retain freedom for your people and the underground city of Salder. With each of the campaigns divided up into between 6 and 10 missions, you'll have to play very hard for war to be over by Christmas.

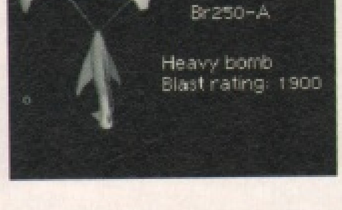
At the beginning of each mission you get to choose your armaments. Your aircraft has provision for a laser, bombs and missiles. Each of these types of weapon comes in a few shades, so selecting the right combination is an important part of the tactics. Choosing between the fast firing low powered laser and the slow firing high powered laser is mostly a matter of taste, but getting the right combination of missiles, with their varying degrees of power, number and accu-

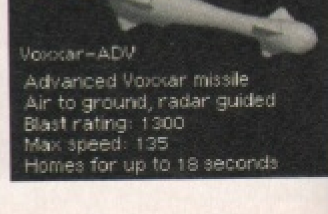
▼ Here's a selection of some of the weapons which you'll use against the alien foe. Lasers, bombs, missiles and rockets aplenty.













racy, is vital. Once your first mission is under way, you'll very quickly pick up on the fact that this is a flight sim with the emphasis on arcade action rather than simulation. There is none of that taking off and landing lark, here you're dropped right into the action.

Various control options are available, but using a mouse for steering and firing with a hand on the keyboard for controlling thrust, weapon selection and so on seemed much the most satisfying approach. On the control panel a radar keeps track of the relative positions of your enemies, and a small message window displays information about your mission. A small VDU displays data about your weapons and targetted foes. Get into the melee and you'll soon be battling with enemy aircraft, ground batteries and tanks, while trying to knock out enemy buildings.

A well planned learning curve means that in the earlier levels you will find a few well spaced enemies, while in the later levels you can rapidly find yourself in the middle of a hectic battle against multiple enemy aircraft while ground batteries fill the air around you with laser blasts.

The speed of the game engine, even on relatively slow '030s, keeps the action going beautifully. You can bank and swoop with great manoeuvrability, and soon you'll find yourself in epic dog-fights. The fact that the landscape wraps around may detract from any sense of realism, but it has the effect of keeping the action quite concentrated, and you are never very far from a fight.

Bit of a bodge?

The graphics for the aircraft are a bit of a bodge, using pre-rendered images, but the bodge is well judged, and you don't really notice it in the heat of battle. Clever fog effects give the game not only its glorious parallax cloudy skies, but lovely smoke trails and fire effects which add a lot to the sense of solidity. Bodge or not, watching your guided missiles streaking into the distance as they track an enemy aircraft is satisfyingly convincing. It doesn't hold up so well at close quarters, however, so the external view mode is rather disappointing, stick to through the cockpit. You can use the numeric pad to look around and even zoom in and out with the plus and minus keys, so you still have plenty to see.



▲ **Don't they know smoking is bad for the health?**

The really pleasant thing about The Shadow of The Third Moon is that once the initial distraction of the excellent game engine wears off, you've got a very involving and enjoyable game. The structure is well considered, with new challenges being added as the game progresses, and a nice feeling of the sweep of the narrative.

You'll find that it's not just the number and type of enemy that changes, it's also the landscapes. The first campaigns are played out in the green landscapes of home, while the more desperate later levels take you to the grim wastelands of the fogs of Kal Atl, and the final level takes you to Quinrasia and the large sea, where the small islands and large open seascapes make for a very different and deadlier environment to fly in.

As the war progresses, you'll even find yourself flying missions as part of a squadron, with a wingman who you can order to distract the enemy fighters while you attack the land installations.

Sounds Good!

TSOTTM looks good, but it gives you plenty to hear, too. Paula buzzes away to herself churning out some pretty decent if not spectacular sound effects, but if your CD-ROM drive is set up for CDDA audio output, you'll get the benefit of a full CD soundtrack to go with the game. The music suits the atmosphere of the game quite well. There are a total of eleven tracks; classic eurosynth composed by The Soundwavers.

Described by one person in the office as "elevator music of the future", it isn't likely to make waves in the music industry, but for in game music it's a big step up from the norm and manages to be quite film soundtrack like, and adds plenty to the game's atmosphere.

Nothing is perfect, and TSOTTM is no exception. There are niggles with the engine, collisions with the ground are unconvincing, and the view of yourself exploding when you die just work, but these take away more from the game's polish than its playability.

The levels strangely don't end until you hit the f10 key to end the mission, annoying as it can mean that you fly around a while making absolutely sure you're finished before you quit. The slow passage through the (admittedly beautifully rendered) high resolution menu screens can be a hassle, too. Set-up can be tricky, particularly the CDDA support, requiring a bit of basic technical knowledge. On the other hand the range of options is impressive, with CyberGraphX, AGA and general RTG screens supported, a choice of chunky to planar routines, and two sets of object graphics, one for low memory systems and one for those with a bit more RAM to spare.

In game options allow you to trade off speed for rendering quality of the landscape, as well as switching off some of the graphics tricks such as fog effects and tweaking the window size. If the missions are too easy or hard, there are even four difficulty levels to choose from.

The Amiga has traditionally seen games with lots of gameplay but has not until recently seen this kind of realistic graphics. Sadly, it has often been the case of late that games which look very nice fail to deliver on that traditional gameplay. I am glad to say that TSOTTM manages to deliver both. It is said to have sold about 750 copies during the three days of its debut at the Cologne show, and I can heartily recommend you add to that number. ■

Andrew Korn

SHADOW OF THE THIRD MOON

■ Workbench version ....N/A	Graphics 92%
■ Number of disks ....CD	Sound 89%
■ RAM....4Mb fast+1Mb chip	Lastability 86%
■ HD installable....Necessary	Playability 92%

OVERALL

A superb game which looks great too.

92%

Tips Central

This month's array of glittering Christmas tips should keep you and Auntie Flo busy till well past Boxing Day. Meantime, Mark Forbes and Adventure Guru Sjur Mathisen wish all the CU-Amiga readers a tinsel-tastic Christmas!!!

Championship Manager



Pro Champ Man, Craig Rooney from West Lothian reckons he's magic at playing Championship Manager so let's find out shall we...

Firstly the best formation to use is:

1 Goalkeeper
1 Sweeper
2 Central Defenders
3 Central Midfielders
1 Support Man
3 Central Attackers



Leave all the players as normal (not going back or forward). Also left and right sided defenders can play at sweeper, and left and right sided midfielders can play at support as well as central players.

The second cheat is if you own any unhappy players because they are not in the team. Just follow this procedure:

On the main team screen:

Click on GK
Click on SWP (to the right of all the numbers)
Click on GK again
The SWP button should turn from blue to white
Click on the unhappy player
The unhappy player should now be GK.
Click on the GK button once again and now the unhappy player should be at number 00 and will believe he is in the team!

Well done Craig! More Championship Manager cheats next month!

Cannon Fodder 1 & 2

Well it's time for some nostalgia once again boys and girls. And a million and one thanks go out to Guildhall Leisure for releasing the first Cannon Fodder series on CD too.

Tip Number 1: Click on the load icon and press and hold both mouse buttons for 5 seconds and then release. A screen will appear offering you a HARDMAN option and level skip.

Tip Number 2: For both Cannon Fodder 1&2

Go across to the save option, and then when the game requests a name, type in JOOLS. Now the cheat mode should be active and flash across the bottom of the screen. Both the ranks and the skills of your men will have increased somewhat.

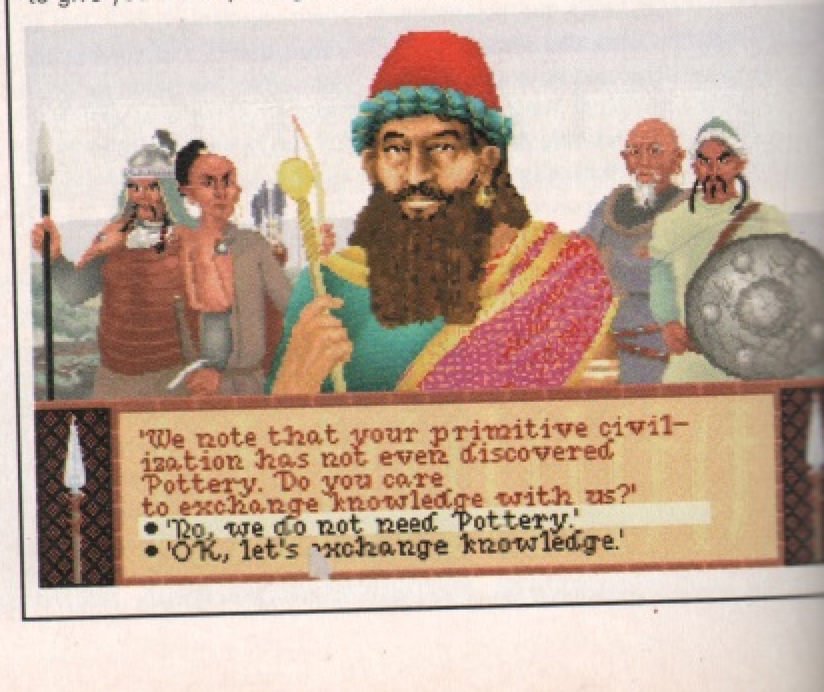




Civilisation

Try pressing the ALT and R keys at the same time in order to randomize the leaders personalities.

Also on early working versions (try the ECS version for instance, rather than the AGA) press the SHIFT key and press 1234567890T so as to give you a complete game world map.



Theme Park

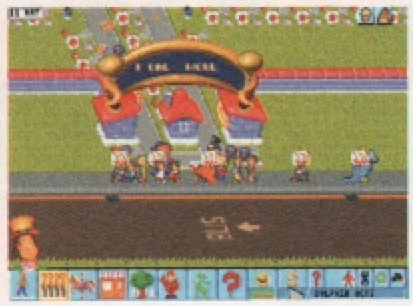
Little Andrew License from Northumberland needs some cheats for Theme Park. Well, it's been a while since I last played this jolly strategy game, but try these for size Andrew.

Enter your nickname as "MIKE" and when your playing the game, press these keys:

- C – for £100,000
- I – See all the rides you want
- Z – Make all the rides available
- X – Make all the facilities available

Or Enter "Flight Sim" for the name of your park and you will start the game with 200,000 instead of the usual 130,000.







UFO

Mr. J Sweeney suggests that there is an easier way to make money without cheating in UFO. For instance:

If you were to build ten laser pistols at $8000 each, you can then sell them for $20000.

J.S points out that the best things to build are items which don't require special materials, e.g; Alien Alloys, Heavy Lasers etc.

Here is a list of some...

Cost per the Sale Prices:

Fusion Ball Launcher -	$242.000	$281.100
Plasma Beam -	$226.000	$267.300
Fusion Ball -	$28.000	$53.300
Tank/Laser Cannon -	$500.000	$594.000
Hovertank/Plasma -	$850.000	$980.000
Hovertank/Launcher -	$900.000	$1.043.000
HWP Fusion Bomb -	$15.000	$31.500
Laser Pistol -	$8000	$0.000
Laser Rifle -	$20.000	$36.900
Heavy Laser -	$32.000	$61.000
Motion Scanner -	$34.000	$45.600
Medi-Kit -	$28.000	$45.500
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Heavy Plasma -	$122.000	$171.600
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Alien Breed 3D

Rusty Denton (now there's a name!) from Southampton can't get past the very first level of the game. Don't worry Rusty, helps at hand. You need to look for the pole like structures, one of them has a button which you must activate and right at the bottom where you started there is another door which must be opened for you to get your ammo. Just in case you have no idea what the heck I'm yattering about, then try these few level codes:

Level 2:
CMOFFJENPPHHFFFF
Level 3:
MIOOEDEOPPFFFFFF
Level 4:
KPKOFOPOHOEHFFFF
Level 5:
NLIAMBOOPHHFHFFN

Master Axe

A cheat from Epic's master blaster himself, Mr Vince!
Press the key "P" to pause the game and enter the following codes:

UUDD =	Master Axe Turbo Mode
RRDDD =	Power-up Mode
UULLRR =	Blood and Gore Mode
UDLR =	Character Shadows
RULULL =	Hidden secrets?
DDLLRRRV =	Sprite Scaling
LRLR=	Slow Motion Mode



Colonization

Tip Number 1: When beginning a new colony, name it CHARLOTTE. This will allow you to see all maps instantly, other European ports, check other country's statistics, and gives you $50000. When you access the other people's European ports you can spend all their money. You can buy anything and spend, spend, spend!

Tip Number 2: Rename your colony to something else and you can start another colony called Charlotte, and get another $50000. You can easily start, then quit, and find you've got $500000 in the bank waiting for you!

Fears

Vicky Chan of Birmingham has played Fears on the CD32 for ages with no joy. I'm not promising anything but... try these extra special level codes with all ammo, all weapons, all 9 lives:

- Level 1 – 6D7FBCOF
- Level 2 – 6DFBBCOF
- Level 3 – 6C77BCOF
- Level 4 – 6CF3BCOF
- Level 5 – 6F6FBCOF

R U beyond help?

If you need help with any game, or if you have any tips you'd like to share with your fellow readers, write to us and mark your envelope Arcade or Adventure accordingly:

Tips Central, CU-Amiga Magazine,
37-39 Millharbour, Isle of Dogs, London E14 9TZ.

Adventure helpline



Monkey Island 2



Beneath a Steel Sky

Monkey Island 2

I've recently started playing Monkey Island 2. I'd be grateful if you could tell me what to do on the boat in part 2. I've loaded the cannon with gunpowder and attached a fuse but I don't know what to do next or how to open the black chest and cupboard in the cabin.

Also in Monkey Island 2, where do I get the scissors to cut the lead the lizard is attached to, in the hotel?

Andrew, Oldham.

Sjur – Sure knows a monkey when he sees one! I don't know what you've picked up on the boat so far, so here's the entire solution for pt 2. Get the feather pen, the ink, and a dusty book somewhere in the captain's cabin. Read the book. Get back on deck and talk to the hardworking crew.

Then climb the ropeladder to get the Jolly Roger. In the kitchen pick up the pot, and open the cupboard. Take and then open the cereal to find a small key. Go down to the storage-room and open the chest. Inside it you'll find some fine wine. In the same room pick up the coil of rope, and some gunpowder. Back in the captain's cabin, use the small key from the cereal, on the cabinet.

Open the chest inside it to find a recipe and some cinnamon sticks. Read the recipe, and go to the kitchen. Ask yourself what people do in the kitchen, and do it. Yes, let's make some dinner. Use all the stuff in your inventory with the pot. Everything you don't need will be put into it, but nothing else. You should be able to get the following into it I think: minutes, note, business card, feather pen, cereal, piece of paper, Jolly Roger, ink, breath mints, fine wine, 100% cotton T-shirt, T-shirt, rubber chicken, staple remover, small key, dusty book, cinnamon sticks, and gunpowder. Now use the map with the flaming mass, and the pot as a helmet. and test your skills as a human cannonball.

For your question on Monkey 2, I assume your lizard is an alligator? Let's agree on that, throw away the scissors, and we might get somewhere. What you need is the knife you'll find *in* the kitchen. Now all you have to do is find *the* kitchen. Walk through the window near the hatch leading to the bar, and you're in! The knife is on the table. Now just cut loose the alligator, and soon you'll have the whole hotel for yourself. Take advantage of it!

Monkey Island 2

I've been playing Monkey Island 2 for ages, and I've hit a dead end in terms of ideas. I'm stuck on Part 2: The Four Map Pieces, on the hard level of the game. I've got two of the map pieces (the one from the antique dealer and the one from Rapp Scallion) but cannot get the other two.

I know 1 is under the cottage on Phatt Island, but cannot win the drinking contest. I know you're meant to empty the grog onto the tree, and fill it with near-grog, but Captain Kate has had the rest of it from the bar on Scabb Island.



Beneath a Steel Sky

Also in the cottage, I've used the telescope outside on the monkey statue which sends a beam of light through the open window, which reflects off the mirror onto the wall above the trap door, but it has no effect. The telescope falls off the statue before I enter the cottage.

The map piece from Governor Marley's mansion has been stolen by a bird and taken to the big tree on Booty Island, where it's lost in a big pile of other maps which the bird is guarding. I have no idea of how to get the map from the pile. I'd appreciate it very much if you could give me any help as it's a shame to ruin such a great game.

Gareth Armstrong, W Midlands.

You should have a leaflet you got from Captain Kate in your inventory. Use it on the poster on Phatt Isle, and leave the island. When you return Captain Kate has been captured, and is enjoying life in jail. As a former prisoner, you have a key. Use it to free Kate, and pick up the envelope with her belongings, including a bottle of near-grog. Now you can win the drinking-contest by doing what you mentioned. Then stand on the trapdor, and push the brick in front of you. Quite a ride? Let's try once more. You have opened the window, and used the mirror with the matching frame, so if you place the telescope on the statue, the sun will now burn a hole in the brick. Try pushing it again. Now you're very close to the map-piece.

Let's go for the last one too, shall we? Pick up the dog at the mansion, and use it on the pile in the big tree. Remember to leave your pockets open by the way, or the dog won't get enough air.

Beneath a Steel Sky

Please help, I'm stuck on Beneath a Steel Sky.

Firstly: Do I need the WD40 and the key in the pipe factory, and if so how do I get past the Crusader? And lastly: In the interface, how do I get past the hole without the thing inside it getting me?

Helen, Cardiff.

You don't need the WD-40 or the key, but I'd use the divine wrath to knock out a crusader. On your second question I can only think of one place with a hole and a hungry monster. You need the lightbulb from the powerplant control-panel to get past it.

Simply put the bulb in the socket on the left side of the hole, and stand on the left all the time to avoid becoming dinner. Now go right a couple of times and run down the tunnel, if you don't want the ceiling smashing your head that is. But that's enough help from me, so now you're back on your own.

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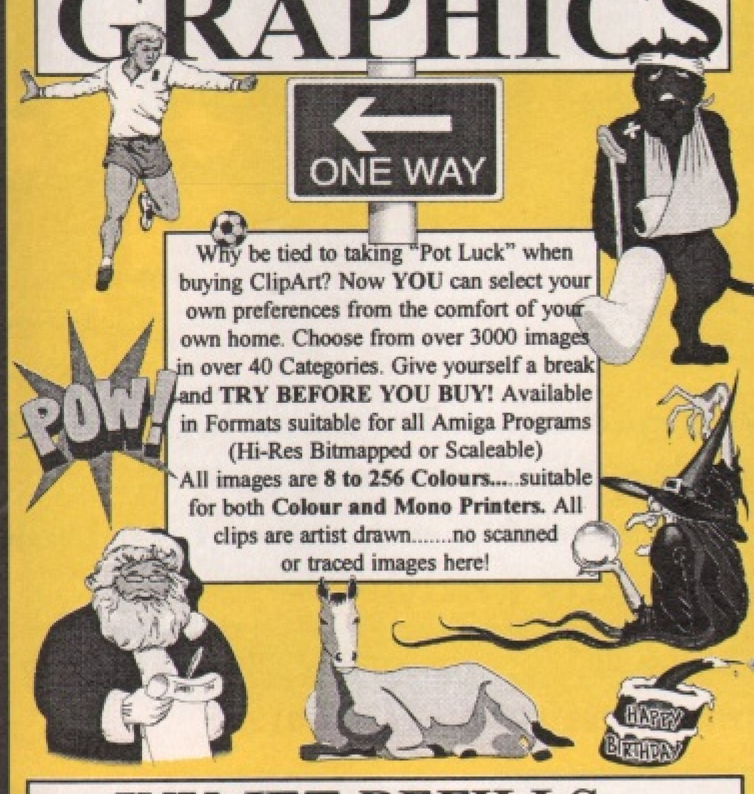
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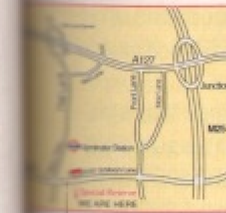
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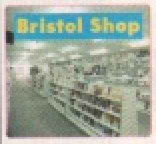
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TechScene this month has some really exciting stuff for you to look at - check out our lead review of the PowerPC accelerator from phase5. Plus some superb animation and sound sampling software too, and the fastest A600 in the west...

TechScene

54 CYBERSTORM PPC
After last month's sneak preview Mat Bettinson gives the S.P. on phase 5's new PowerUP card.

58 SOUND PROBE
Could this be the ultimate sound sample editor? This fully featured fast fourier frenzy comes under our demanding scrutiny.

62 PICTURE MANAGER PRO
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66 APOLLO 630 CARD
Still have an A600 knocking around? Want to make it faster? This is the card for you. The best specified A600 card yet.

69 WILDFIRE
Wildfire has been making quite a name for itself as a hugely powerful animation effects program. Now it's a commercial release, and sporting PPC support. Does it live up to the hype?

70 PERMEDIA 2 PREVIEW
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...then Steve gives his verdict on a trailer load of useful public domain Software.

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80 ART GALLERY
You the readers artistry is put on show for all to see and enjoy... Andrew Korn dons his art historian's cap...

Cyberstorm PPC

AMIGA SUPERSTAR

PowerPC Amigas are now a reality since the arrival of phase 5's Cyberstorm PPC. Following last month's exclusive first look, here's the full nitty gritty.

- **Price: See Options box**
- **Supplier: Power Computing © 01234-851500**

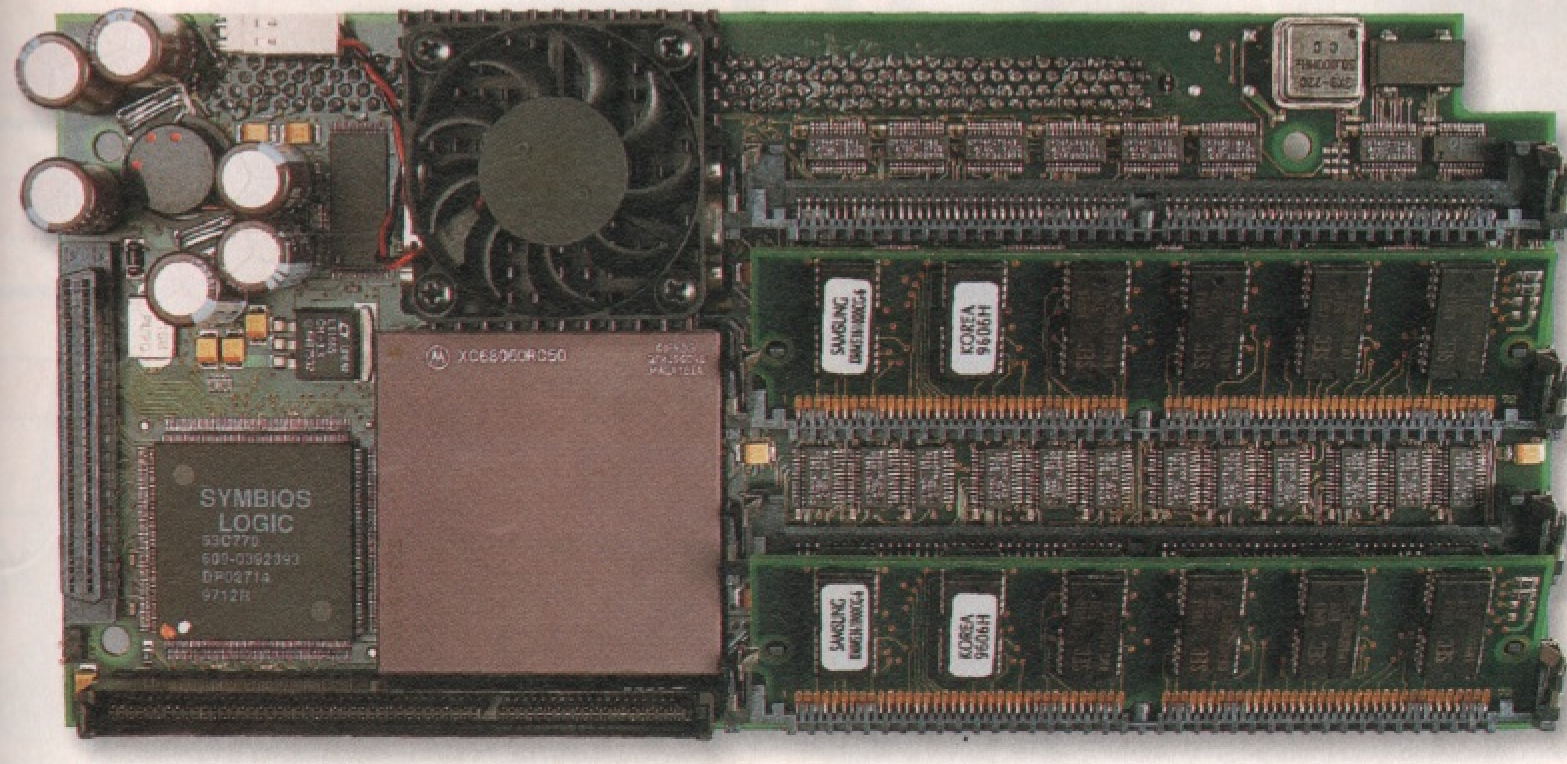
The Cyberstorm PPC's entrance to the CU Amiga offices was not what it should have been. It should have been delivered upon a red velvet cushion, pandanus petals sprinkled in it's path and a choir of 64 nubile virgins awaiting the Arrival. Instead the usual hairy old posty dumped it in reception. What the Royal Mail lack in a sense of occasion was adequately balanced by our enthusiasm to check our phase 5's first installment in the PowerUp masterplan.

In case you've not been paying much attention to the Amiga world of late, here's why this board is creating so much excitement. When the Amiga was first specified back in the early 80's, the designers chose to use a central processing unit from Motorola called the 68000, a very advanced and excellently designed chip. Motorola developed this chip in increasingly more powerful models such as the 68020 used in the A1200, the 68030,'040 and the '060 which is the fastest CPU for the Amiga. Then Motorola stopped and moved over to their new generation of RISC processor, the PowerPC. RISC chips use an instruction set which is more rationalised than traditional CISC processors such as the 680x0 series and the Intel processors used in the PC. They are able to execute commands using less clock cycles, and are therefore fundamentally faster. The Apple Macintosh, which like the Amiga started on a 68000, moved to PowerPC a few years ago, while the ownerless Amiga has been left clinging to a series of CPUs which are increasingly looking like yesterday's technology. Phase 5 have decided to change all that with a range of accelerator cards which use the PowerPC chips as a multiprocessor, sharing system access with a fast 680x0 chip to retain full compatibility.

The CS-PPC itself is a so-called 'fast slot' accelerator so it will fit all Amigas equipped with one such as the A3000 and A4000 desktop and tower versions. However, A3000s require a hardware modification because of a lacking INT line. Instructions on the hack required can be found at http://www.vgr.com/int2 and in the web section of our CD.

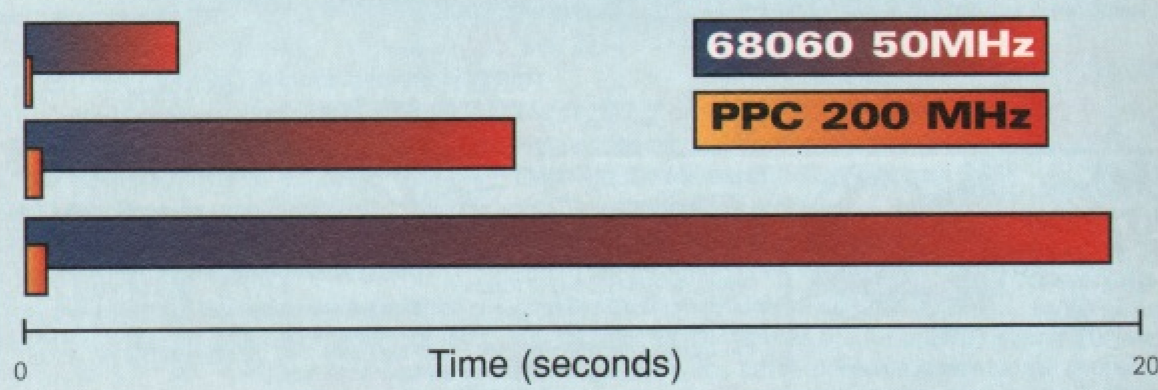
The most noticeable thing about the card physically is the brisling of large capacitors in one corner. These form part of the power supply circuit which is necessary because of the voltages that the 68060 and PowerPC require. It doesn't take a rocket scientist to figure out that the hardware is an engineering masterpiece. Every square centimetre of PCB has a component on it. There's a bank

▲ The Cyberstorm PowerPC is the first part of the phase 5 PowerUp project. Shortly to come are the BlizzardPPC and the CybervisionPPC and BlizzardVisionPPC graphics cards, then multiprocessor cards and finally, the A\box.



of 4 SIMM sockets, a SCSI Ultra-Wide connector and another large connector for the forthcoming CyberVision PPC (see page 70). The 68060 sits next to the Symbios Logic 53C770 SCSI controller and dwarfs the much smaller PowerPC 604e itself. There is a small quiet fan and heatsink on the PPC provided but it seems to run extremely cool anyway.

The CS-PPC operates a true 64-bit memory architecture which means that SIMMs need to be populated in pairs of the same size. 60 or 70ns SIMMs can be used but with the faster units, the memory timing can be sped up with a small tool which increased the PPC Memread benchmark from 156Mb/s to 185Mb/s. Wow!



The graph above shows the time taken to zoom into the valley of a Mandelbrot set in 800x600 pixels, 16bit colour. Each bar represents a zoom deeper into the set and requiring more iterations. Using the Benoit software supplied with the PPC card.

Ultra SCSI

The built-in fast DMA SCSI Ultra Wide interface is just as new to the Amiga as the PowerPC CPU. Unfortunately using it requires the addition of some moderately expensive cables and active terminators.

There's so little space on the board that there's not even a SCSI terminator so in the most basic configuration one would need a SCSI-UW hard drive, a cable to the drive and an active terminator on the other end. None of that will come cheap. To get the most from this already expensive card, quite a bit more money is going to have to be spent on the SCSI side. It is also possible to get adaptors to standard SCSI-II so existing devices can be used. However the Amiga dealers seem slow off the mark in stocking the required cables and adaptors.

Inclusion of the fastest possible SCSI interface clearly identifies the CS-PPC as a no-compromise high-end performance card, but with a high end price too. Cheaper A1200 PPC accelerators are to come, big-box Amiga users may have no choice but to wait until the CS-PPC price comes down.

Cyberstorm PPC options

Cyberstorm PPC	150MHz	604e	no 680x0 CPU	£489.95
Cyberstorm PPC	150MHz	604e	68040 40MHz	£549.95
Cyberstorm PPC	150MHz	604e	68060 50MHz	£699.96
Cyberstorm PPC	180MHz	604e	no 680x0 CPU	£579.95
Cyberstorm PPC	180MHz	604e	68040 40MHz	£699.96
Cyberstorm PPC	180MHz	604e	68060 50MHz	£799.95
Cyberstorm PPC	200MHz	604e	no 680x0 CPU	£679.95
Cyberstorm PPC	200MHz	604e	68040 40MHz	£719.95
Cyberstorm PPC	200MHz	604e	68060 50MHz	£879.95

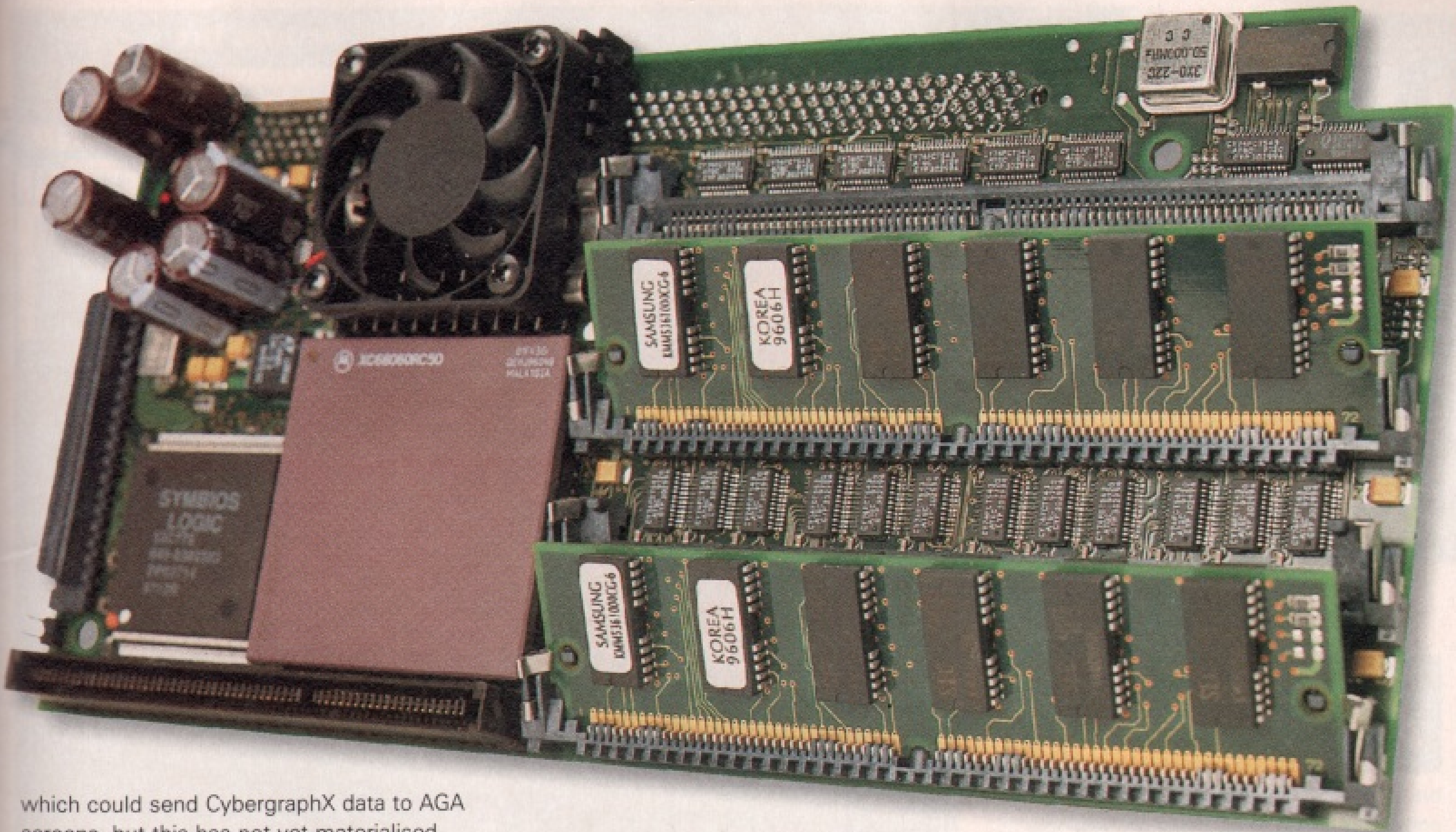
Support software

In the CS-PPC box is a CD-ROM and two floppy disks. One floppy disk contains the drivers and prep utilities for the SCSI interface. The other contains the ppc.library necessary to use the card. For some reason, phase 5 neglected to include an installer that copies the ppc.library or even a readme to detail this. In fact the entire PPC-CD-Update drawer doesn't have an icon.

Sadly this is a recurring theme with the support CD-ROM also which is very poorly organised. The phase 5 PPC demos and developers ADE environment can be found in the PPCRelease drawer while a couple of third party PPC demos can be found in the Contrib drawer. The CD shows signs of being a bit of a rush job, no doubt a product of phase 5's desire to get the boards out to an impatient public as quickly as possible.

Updates and patches are already appearing, and there is likely to be a much better polished CD pretty soon now, but in the current form, getting everything up and running is a bit of a struggle. Originally there were plans to release this with a version of the CybergraphX retargettable graphics system

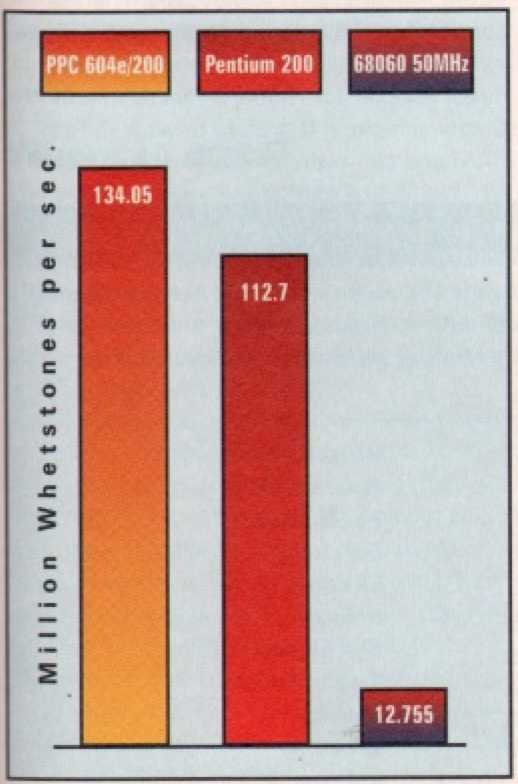
▲ Everyone wants to know the answer to one simple question: How fast? Until comprehensive benchmark utilities such as AIBB are available for PPC, any benchmarks are going to be pretty dubious. Here we show the advantage of PPC for one good real world application, fractal rendering.



◀ The big chip in the middle is the 68060 – the PowerPC chip is hidden under the fan. At the far end is the SCSI 3 connector, and that odd slot at the bottom is the graphics card slot.

which could send CybergraphX data to AGA screens, but this has not yet materialised. Most of the demos require CybergraphX, however, so AGA users are going to feel rather left out.

The selection of software on the CD is quite varied and mostly best used to demonstrate the board's power and little else, but there are a few very useful exceptions, such as LW show, a lightning fast Lightwave object displayer, XPK compression routines in PPC, and some MPeg software. Benoit is a respectable Mandelbrot fractal explorer. This has a flip gadget between 68K and PPC code and correspondingly has a major impact on rendering time.



▲ Andreas Heumann's port of the Whetstone benchmark to PPC makes preliminary speed comparisons possible, and here are the results.

The MemTest program performs a memory benchmark on the PPC and 68K CPU. Oddly the program to switch the CS-PPC to the faster 60ns RAM timing is not present on the CD-ROM or floppies, you can find it in the magazine directory of the CD.

Isis PPC could be a highly useful program. This is an MPEG video player which requires a Cybergraphics 16 or 24-bit screen. It locked up on running on our machine until a later ppc.library was obtained from phase 5. Even then it was highly unstable.

As of going to press this was still being worked on. We did get it to run a couple of times and it delivered highly acceptable mpeg video playable. PPCMpegPlayer plays MPEG audio including layer 3. It does so via the AHI retargettable audio system; so taking advantage of a variety of superb sounding 14-bit Paula modules as well as virtually any third-party 16-bit audio card going. It sounded great and used virtually no 68K CPU time.

In fact, we calculated that it was using only 16% of the 200MHz 604e too. If you have a good collection of MPEG audio, then this will be extremely handy indeed.

The bright future

The developers support for PowerUp is initially quite dire. There's no proper Amiga native compiler which can generate PowerPC code. However, Wolf Deitrich of phase 5 informed us that the Amigas best compiler, SAS C, would be upgraded to PowerPC support. This is superb news for one and all, while SAS no-longer officially support SAS C on the Amiga, the package is in full development by its core author. phase 5 also hinted that they may make SAS C PPC available to dealers, currently it's not sold in Europe and this would make a high quality PPC development system widely available. The Cyberstorm PPC is expensive, however it has the highest specification ever seen on the Amiga platform; the fastest 68060, the fastest SCSI and, the ultimate in computing power, the 200MHz 604e. Software releases are trickling in and programs like Wildfire PPC and so on will rapidly make this a must have product for anyone using an Amiga for professional graphics. It's totally dependent on software appearing to take advantage of it, but software developers have greeted this arrival with a lot of enthusiasm – rumour has it we'll even see Lightwave reappearing on the Amiga in PPC form.

Prices will fall and low end products will be introduced for the A1200 in the first Quarter of 1998. The CS-PPC proves phase 5 can do it but that there's further work to do on the software support front. Having shipped 1500 of these units so far, the future looks bright for PowerPC on the Amiga. ■

Mat Bettinson

CYBERSTORM PPC
Developer: phase 5

System Requirements: An Amiga with the 'fast slot'. A3000s need a modification.

Ease of use 84%
Dismal CD-ROM and installation procedure but the accelerator has no jumpers to fiddle at all.

Performance 98%
Is there a person in the house who's not impressed? POWER in capitals.

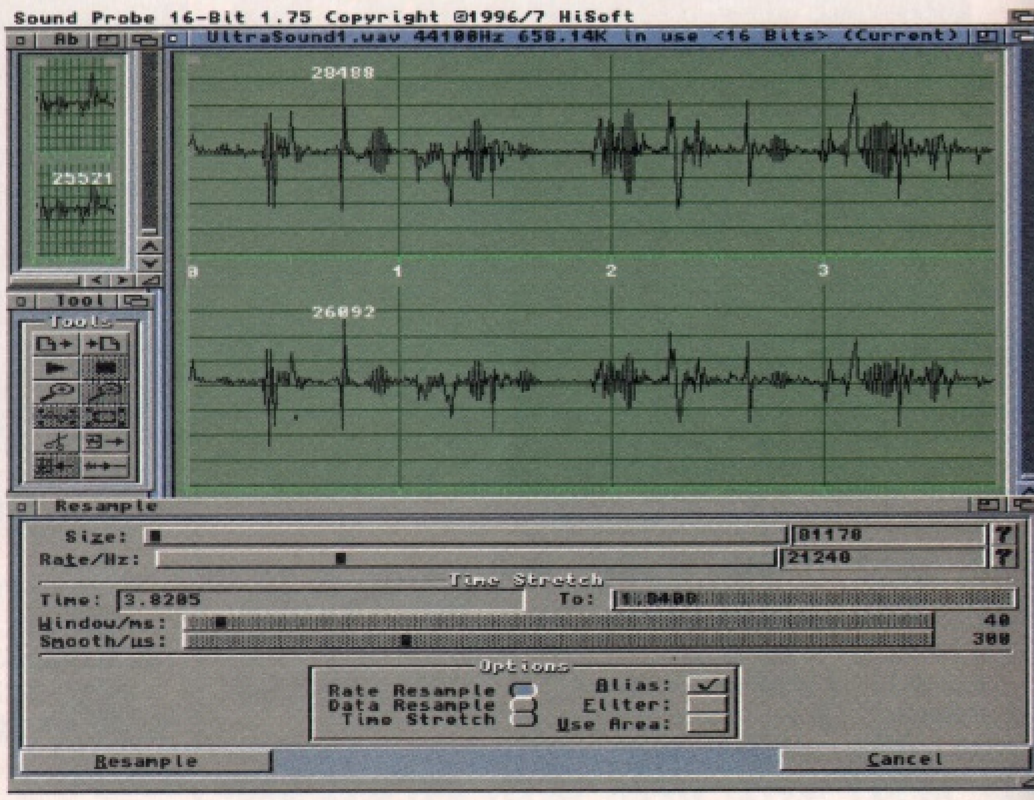
Value for money 78%
Horrendously expensive, this may price big-box Amiga users out of the PowerUp program.

OVERALL
Too pricey, but for the power user this is simply a must have. **90%**

Sound Probe

■ Price: £24.95 ■ Supplier: HiSoft ✆ 0500 223 660 http//www.hisoft.co.uk

An all-in-one sampling and editing solution for everything from low to high end audio sound too good to be true, but could it be?



▶ **Try the Timestretch feature for long 'n' lazy vocals that crop up in almost every dance track these days.**

Aside from SoundStudio, Amiga audio software development seemed to come to a grinding halt about three years ago. To be fair, most developers had probably had enough of trying to squeeze professional quality audio out of Paula, the Amiga's old four channel 8-bit sound chip.

Commodore had been promising audio improvements for years, and when audio was overlooked with the release of the A1200, new rumours sprang up about an official Commodore Amiga DSP add-on. It never turned up, but since then the 8-bit limits of Paula have become less of an obstacle.

The likes of SoundStudio and its 'direct to disk' song recording features, when combined with the falling price of CD-R writers, have made it possible to bang out 16-bit digital masters on an A1200, while sound cards such as Delfina and Tocatta offer basic but high quality 16-bit digital stereo input and output for Zorro-equipped Amigas.

It's about time some new software was released to take advantage of all of these advances and more – to take it to the next stage. That's what Sound Probe hopes to do.

A new approach

The bulk of sampling software the Amiga has been subjected to in the past has probably been a bit 'off the wall' to put it politely – buggy, hacky and without a screenmode requester between them. That's fine if you never knew your Amiga could multitask, only ever used it with a TV and never wanted to do anything else but use that one program.

These days most of us expect a bit more. Sound Probe is a 'proper' Amiga application with familiar looking windows, pull down menus, a screenmode selector and more configuration options than you'll ever need.

It's also been designed as a modular system so as to fit in and adapt to as many different Amiga setups as possible. There's support for 16-bit sound cards via the shareware retargettable audio system AHI and direct support for HiSoft's own Aura and Clarity samplers. It prefers to work in Fast RAM and can even handle enormous hard

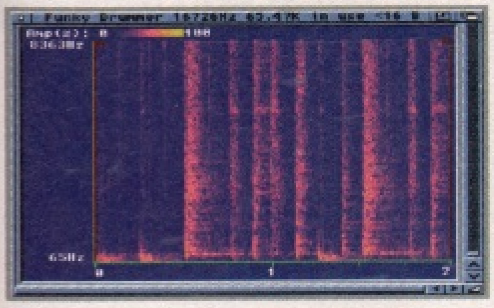
Just for effect

Any sample editor can cut and paste chunks of data. What separates the men from the boys is the range and power of the sound processing tools on offer. Sound Probe really goes to town when it comes to special effects with a modular system that allows new ones to be added in future. Top billing goes to the Timestretch feature, while there's a healthy selection of others to filter, phase, polish and distort your sounds with. Here's the complete list (so far)...

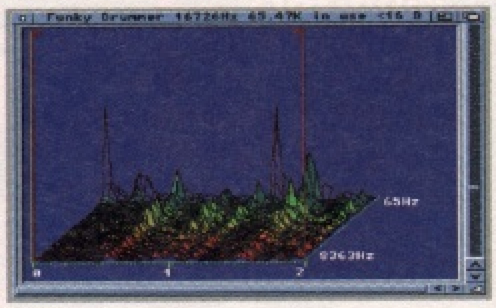
- Area Echo
- Band Pass Booster
- Band Pass AV
- Band Reject AV
- Bass Boost
- Blur
- Brighten
- Change Pitch/Timestretch
- Chorus
- Clap
- Clean Start-End
- Clip Distort
- Compressor
- Crossfade
- DC Adjust
- De-crackle
- Delay
- De-noise
- Distort
- Dither noise
- Echo
- Fast Reverb
- Flange
- High Pass Booster
- High Pass AV
- Low Pass Booster
- Low Pass AV
- Metallic
- Modulate
- Modulation Echo
- Muffle Echo
- Noise
- Noise Gate
- Normalise
- Phaser
- Phase Sweep
- Pitch Bend
- Resample
- Resonance
- Reverb
- Reverse Echo
- Scale Pitch
- Scratch
- Shadow
- Smooth
- Stereo Echo
- Treble Boost
- Tremolo
- Tube
- Volume
- Wah wah

Amaze and amuse your friends...

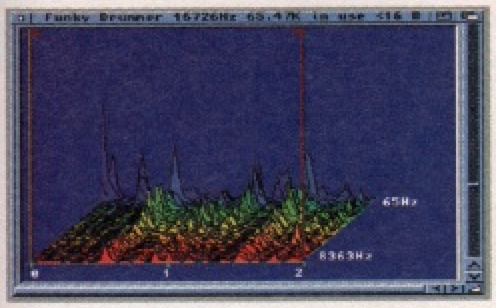
Most samplers give you a standard two-dimensional graph of the waveform. Combined with good zoom tools to get you right in on precise areas, this is sufficient for most editing requirements. However, Sound Probe also offers an alternative 2D view and a couple of 3D graphs.



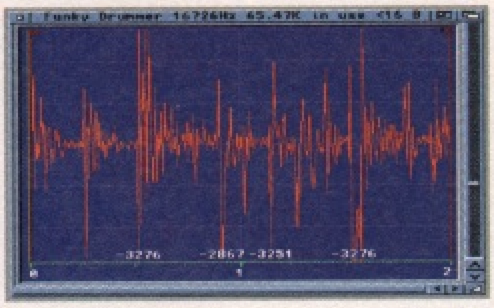
2D frequency graph
With frequencies represented on the vertical axis and time on the horizontal, a range of shades is used to indicate the volume (amplitude) of the various frequencies. This isn't particularly useful in day-to-day editing but it looks quite cool and scientific.



3D FFT surface graph
This one shows the amounts of different frequencies in a form that works well as an instant visual reference. The peaks and troughs represent amplitude levels, the horizontal axis is time, and the frequencies are plotted on the Z axis in multi-colours.



3D frequency graph
Very similar to the other 3D graph, this is also based on the FFT (Fast Fourier Transformation) technique. In future versions of Sound Probe we may see this extended to include visual filtering of specific frequencies. Here's hoping...



Standard 2D waveform
It's fast to use than the others and generally it's all you need. The peaks are enough to indicate where certain parts of your sample begin and end, so it's handy to have this quicker, simpler display when you want to zip around with a few mouse clicks.

drive projects for editing entire songs.

It's odds on that whatever your current sampling software does, Sound Probe does too. It's also likely it will do whatever it is you wished your current package did, plus a whole lot more.

Where to start?

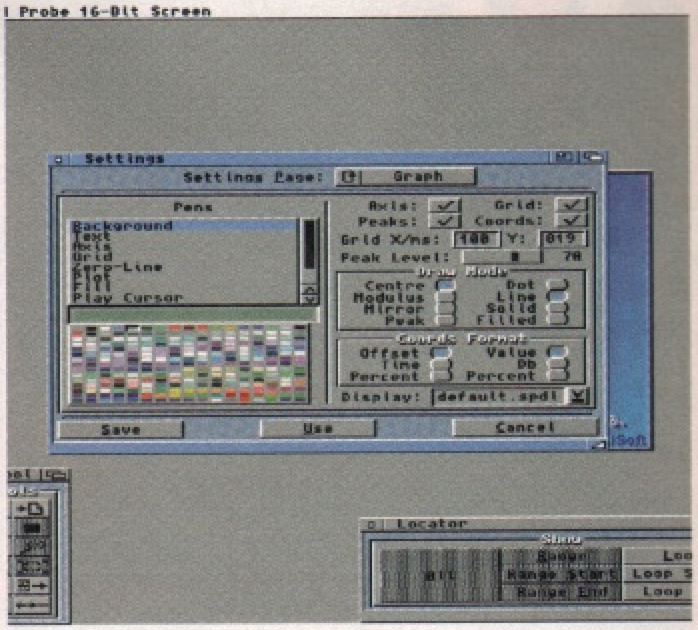
The trouble a poor old software reviewer has when faced with something like this, is where to start. Sound Probe doesn't dictate any working methods and isn't limited to any one application. To give you an idea of what you might choose to do with it, let's take a walk through some possibilities.

Whatever you're doing, you'll need to get yourself a sound sample to work on. There are two ways of going about this: either load one from disk or create one by making a new recording. Recording a new sample requires you to select your input device from a choice of eight: AHI, Aura, Aura 8, Clarity 16, Generic Parallel, Generic PCMCIA, Megalosound or Megalosound Fast.

In theory the AHI option will allow you to sample from any sound card that has an AHI driver, although it refused to work for me with a Toccata card (although AHI output through Toccata worked fine).

Now that you've got your sample you can do all kinds of things with it.

First of all you can look at it in one of four main view modes ranging from fast and functional to fancy and colourful. If you've got a particularly large sample you could have recorded it direct to your hard drive.



▲ **Here's just one of the many Settings windows, which together allow you to alter and customise almost everything about the program.**

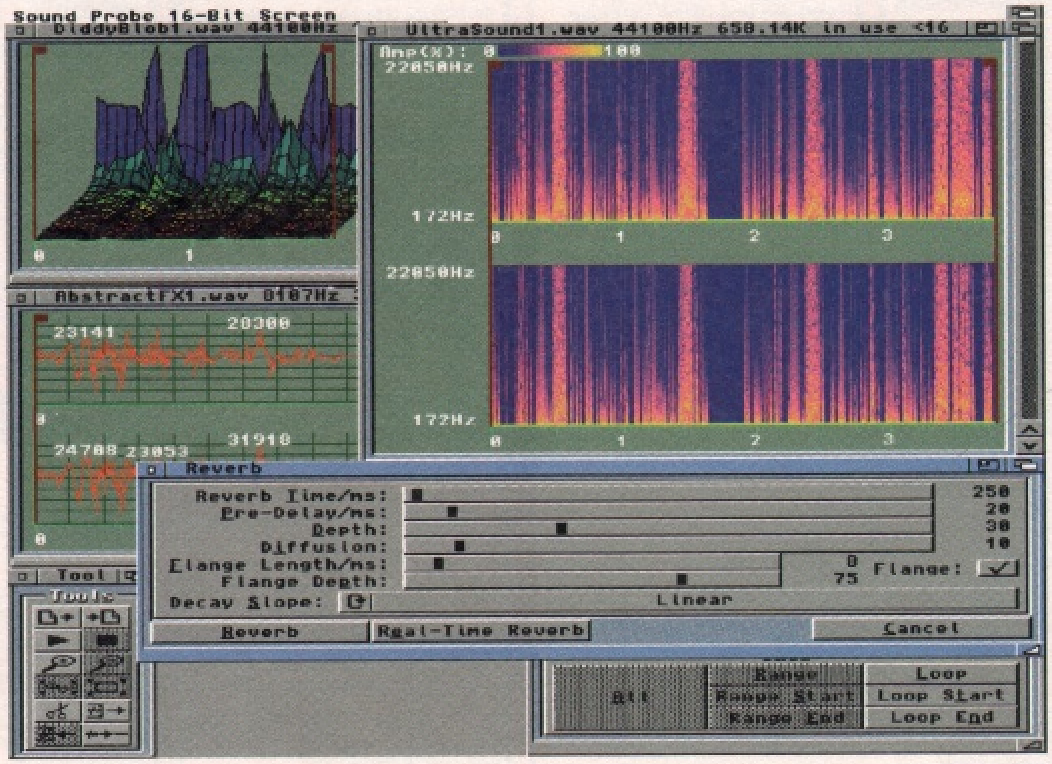
Working from hard drive rather than RAM is slower but it opens up lots of exciting possibilities, such as recording and editing entire 16-bit stereo songs.

Taking a lead from the previous 'king of the beats' AudioMaster, Sound Probe lets you create a long sequence from a short sample with the help of multiple loops. This is of limited use but will no doubt come in handy for some. One possible use is for soundtracking a video production using a few bars of backing music. It's easily done and requires no musical skills, apart from the ability to set a few loop markers at appropriate points.

Effects processing

Computer-based sample editors come into their own when you reach the topic of effects processing, and this is one of Sound Probe's strongest features.

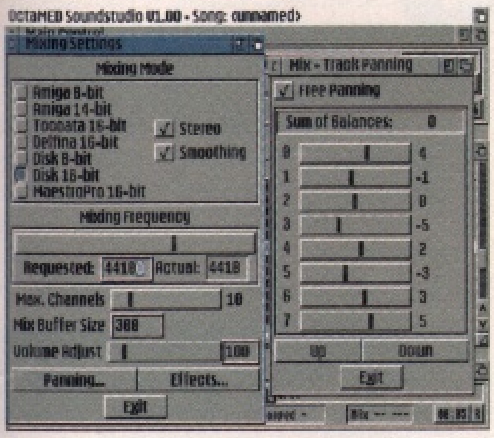
Even with the falling cost of studio equipment, it would cost an arm and a leg to assemble a collection of hardware effects processors to perform the range of functions on offer from Sound Probe.



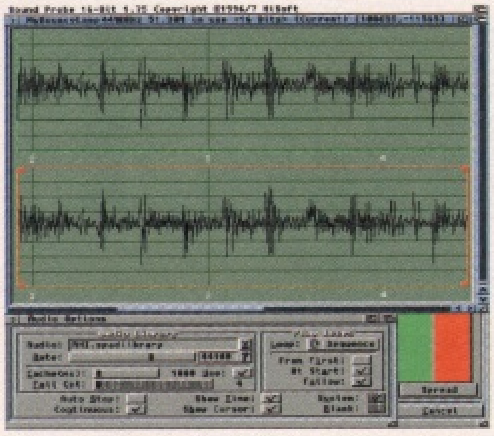
◀ **How would you like your samples displayed Sir? FFT, 2D frequency graph, sunny side up?**

Four steps to heaven

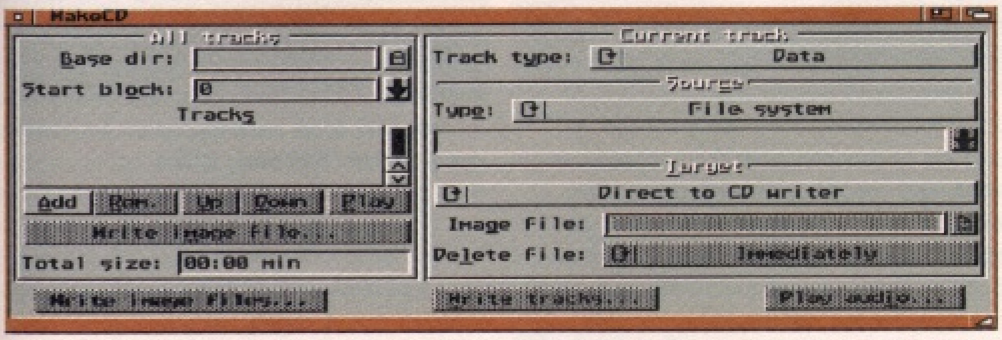
Watch this: we will now demonstrate how you can create a professional quality stereo 16-bit audio CD, complete with all the studio effects you could wish for, with nothing more than one Amiga 1200, a Squirrel CD-R kit, OctaMED SoundStudio and Sound Probe.



1. Using high quality 16 bit samples (as on this month's CD) compose your music with SoundStudio then record to hard drive at 44100Hz stereo (with smoothing).



2. Open the digital audio file in Sound Probe and apply as many effects as you require to chosen sections of the song. Edits can also be made to extend or curtail specific parts.



3. Convert the project to CDDA (CD digital audio) and burn it to a blank CD-R disc with MakeCD or your preferred CD burning software, along with any other tracks you have.



4. Begin by firing up your hi-fi system, open up the CD tray, pop in your brand new gold disc, turn the volume right up to number ten, and then you can sit back and bask in the glory of your perfect production.

So who was it that said you need a DAT recorder then?

Anyone into making dance music will surely have desired a timestretch capability (in which the length of a sample is changed without its original pitch being altered) if only to be able to perform the latest in-vogue effect. Amazingly Audiomaster IV was the only Amiga sample editor that could do this until Sound Probe, five years later.

Here the idea is taken a little further, with the option of combining timestretching with pitch bending, so you can gradually slow down or speed up a sample and retain its pitch, or do the opposite and slide the pitch whist retaining the original length. As with all the effects, you can adjust any of the main parameters that control the final sound via sliders.

Generally the effects have been designed foremost to be used on samples in memory, but many can also be used in realtime to process a signal via your chosen sampler.

The reverb is one of the best you'll have heard from an Amiga sampler. This is one effect that has proven very difficult to pull off convincingly, and while you might have to experiment with some of the settings, you should find it satisfactory for adding fairly realistic ambience to most sounds.

Even though there are more effects on offer than in any rival package, you can never have too many. With that in mind it's good to see that Sound Probe has been designed to be able to accept new 'modules' as and when they become available. This also opens the door to any enterprising programmers to come up with their own.

An official support web site should be up and running by the time you read this which will act as a centre for any such updates or additions (www.york.ac.uk/~djor100/sprobe.htm).

Stability factors

It wouldn't be fair to reach the end of this review without mentioning the sticky subject of stability. During extensive testing of Sound Probe I suffered quite a few crashes and stumbled across a few bugs.

Fortunately I was in the position of being able to E-mail the author, who was able to diagnose the problems, advise me where necessary and fix up some bugs. The specific bugs I came across needn't worry you, as they've been fixed for the release version, but it does suggest there may be others that will be uncovered as people use the software in different ways on different set-ups.

One of Sound Probe's best features is its ability to work on large samples from hard drive. However, in order to do this the file you're working on must be kept 'open'. If for any reason the software crashes while the file is open the drive partition on which it's stored will be invalidated. That means you'll then have to fix up the partition with Quarterback Tools or a similar utility, which is a high price to pay for a system crash.

This shouldn't be a major problem now it's had a bug fix, but it is worth knowing.

Conclusion

Aside from stability problems (which seem to have been solved) it's hard to fault Sound Probe. It is hard to find your way around at first, partly due to lack of structure in the reams of menus and options, but due mostly to the sheer size and flexibility of the system.

Fortunately the manual is excellent, going into each section of the program in some detail. The modular design means it can only get better in future. It's already way ahead of anything else that's out there, and with any luck we'll see more bits and pieces added from third parties.

Don't forget there's a demo of it on this month's cover CD-ROM. Check the documentation for the limitations and give it a go. I don't think you'll be disappointed. ■

Tony Horgan

SOUND PROBE
Developer: HiSoft

System Requirements:
68020 or higher, Workbench 3, 4Mb RAM, hard drive

Ease of use 88%
Pretty good, although it can get a bit messy at times due to the sheer amount of options and windows on offer.

Performance 91%
Generally excellent with an enormous range of uses, although stability comes into question.

Value for money 94%
It doesn't come cheaper than this, especially for such a professional production. Brilliant value.

OVERALL
The best sampling and editing software by a mile
90%

Picture Manager Professional

■ Price: £39.95 ■ Supplier: Blittersoft © 01908-2614661 http://www.blittersoft.com

Are you tired of loading countless images to try and find the one that you're after? Picture Manager Pro claims to be able to help.

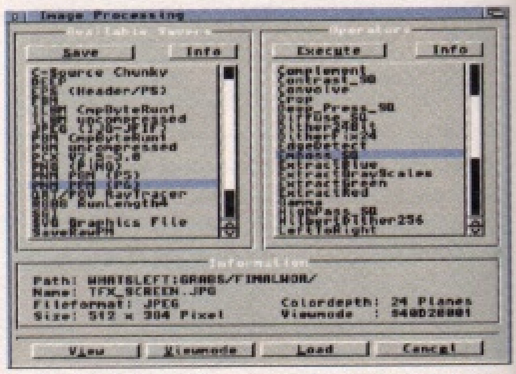
Since the Amiga is very involved in rendering and image processing, it stands to reason that many will amass a large collection of images. Finding the right images and converting them into other formats can be a complete pain. Picture Manager Pro comes to the rescue in a combined thumbnail picture catalogr, image conversion and processing package.

On first installing the package, I faced instant crashes. Digging deep in the documentation revealed that it's not possible to have the CGraphX and Picasso 96 RTG libraries installed at the same time. PM Pro will run on any screen either native or RTG driven. The GUI itself has two modes; a windowed mode where the button bank and navigation buttons are in a small window and the picture thumbnails are in another, or a full screen mode where the buttons are fixed to the top of the screen and thumbnails fill up the rest of the entire screen.

Poor icons

The buttons themselves are very poor three colour icons which are difficult to tell on their functions. There's no context sensitive or bubble help either. Given the package is designed to run on high-colour screens, I would have thought a few pens could be spared for better icons. The menu options and GUI also somewhat diverge from expected behavior to reinvent the wheel again.

Whilst that's a pet hate of mine with Amiga applications, it didn't take long to figure out where things were. Selecting new catalog, a GUI appears asking for the catalog type which contains a gadget to set the size of the thumbnails and whether they are monochrome or colour. There's 3 thumbnail choices; 80x64, 120x96 and 144x112. For some reason the catalog name and description are converted to upper case elsewhere.



▲ Some basic image processing options are provided care of the Super View library system.

There seems little point in that. To add pictures to the newly created catalog, one chooses the strangely named 'expand' submenu. In here we can select individual files, directories and directories with complete recursion to inner directories.

Sounds good in theory but I can't help thinking the programmer didn't understand how file requestors work. There is no way, for example, to select some files in a directory and them some directories as well. The first thing I wanted to do, in fact. A workaround would be to add those files and then go back and add directories. Erm no, you can't multiselect directories and if you try to add more files, PM Pro complains that the 'logfile' still exists and would you like to overwrite it! Now that's just plain silly.

Move along now...

So, you need to move your images around so that everything you want to catalog is in one directory. Surely you shouldn't have to move your files to suite the cataloging program. After the stage of selecting files, a summary of the image types is displayed.

Rather than list all the supported file formats, it will suffice to say that PM Pro impressively supports every file format I ever heard of and them some. The package will even interface with an installed Ghost Script set-up to support EPS. Ghost Script is not the easiest of packages to use though, I would have liked to have seen EPS built in so clip art could be worked on in much the same way. Then we press expand again and PM Pro closes the screen, strange. A GUI on the Workbench shows the status as every

▼ Thumbnail images give a good impression of the contents of your image drawers.



picture is loaded and a thumbnail created.

Clearly with a lot of pictures this can take a very long time, depending on CPU power of the Amiga concerned. Why didn't PM Pro just leave the screen open and leave the status window on that? Who knows. The progress bars in lengthy operations tend to stop at random positions for some time rather than be a good indication of progress.

Impressive thumbnails

My grabs directory took about 2 hours to completely scan. After which the screen reopened with all the thumbnails.

One could quickly move between pages of thumbnails and the image quality was appropriately impressive. As part of the reinvented GUI system, short and long clicks on the thumbnails can be configured for different actions. One of which may be a pop up menu system which allows for selecting of; view, remove, delete, mark, process, convert, information print and launching of PPaint or DPaint IV. The latter seem to be hard coded into the software although you select the paths to them. Once the images are in the catalog, they can be sorted by a variety of methods including name, description or usefully, the creation date. It's also possible to get ASCII lists of the images in the catalog of varying degrees of verbosity.

The two disk set comes without a manual and all documentation is in AmigaGuide form. This is accessed from the main GUI via a menu with a long list of entries for each section of the package. Context sensitive help or help bubbles would have been better. Scanning direct from the Scanquix package Scanquix 3 device is supported. Printing directly via Turbo Print is also supported. Each picture can be individually printed or the entire catalog can be. However, there's no control at all on the printable image sizes, borders and captions. The upper case descriptions plague print-outs as well.

The processing menu has a range of operators including some useful dithering options, the usual blur/sharpen convolves and colour alteration/correction functions. There's a complete lack of an undo button though, one has to close the window and start again to go back to the original image. The image processors are those which come with the Superview image library system. Superview is bundled with PM Pro and installed in the same step.

Slide to it

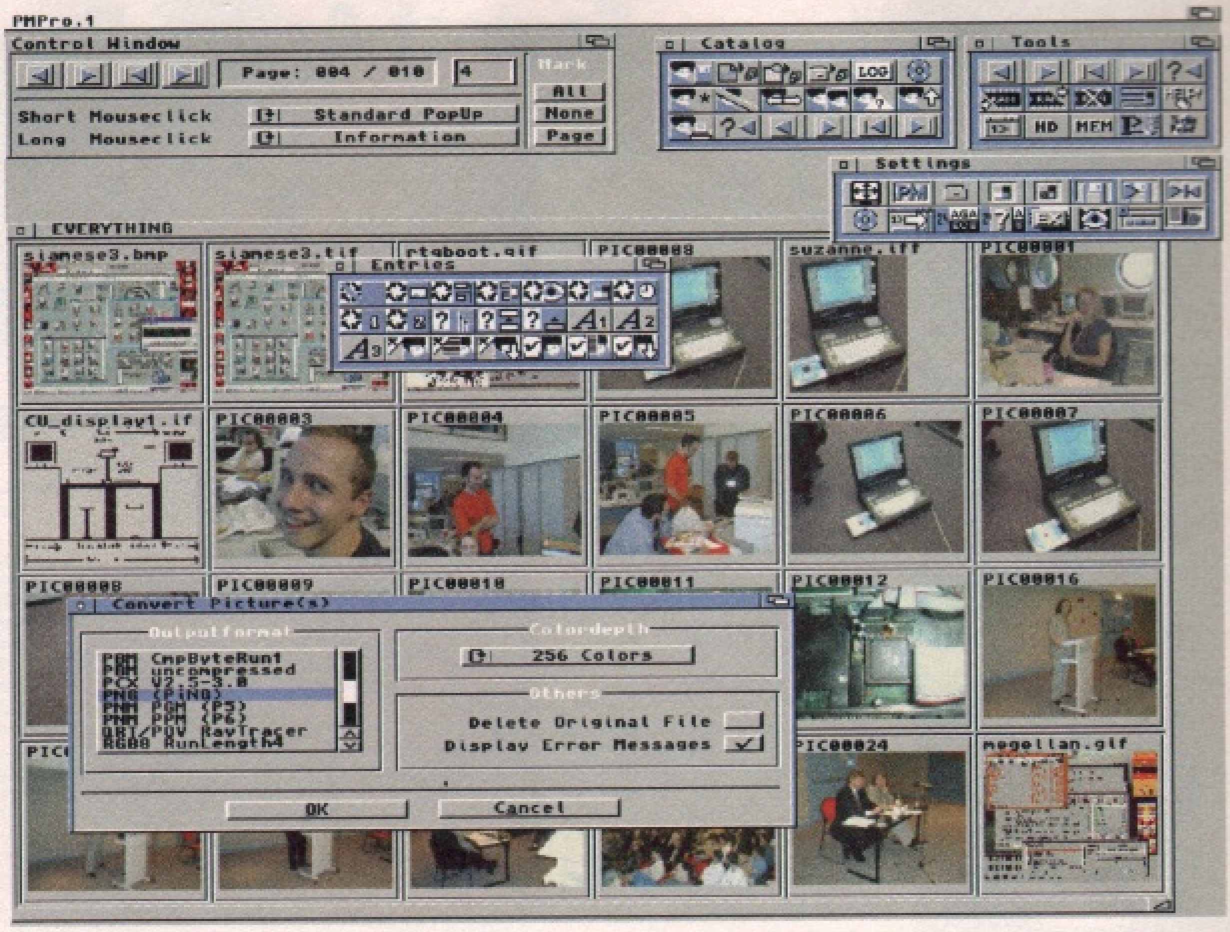
PM Pro will also create slideshow anims and contains healthy ARexx support along with useful scripts for browsing inside LHA/LZX archives and so on. Ultimately, it's a good picture management system. Support for scanning and printing via the leading commercial packages is great. It supports converting most image type to another and displays well on the leading RTG graphics systems as well as the Amigas native display.

Support for Photo CDs is also included, the thumbnail previews of the PhotoCDs are displayed but the pictures accessed are the full high-resolution versions. When restarting PM Pro, the lastest catalog is automatically loaded – good for restarting a project. User menus can be configured, then set to appear over images with short/long click qualifiers. That's useful for sending the image to an application of your choice or by performing a step of operations. Those that are provided, result in windows covered in yet more of the nasty icons for use with your own functions.

PM Pro worked well at scanning my hard drive and getting a good indication of what pictures are where and for quickly converting them to other formats. It's not without flaws though, certainly I'd like the interface spruced up and the serious limitations of adding images to the catalogs to be addressed. More flexibility to printing formats would also be desirable.

With ample room for improvement PM Pro is still a solid product – highly useful if you work with a lot of images. The bottom line is try the demo on the cover CD first. ■

Mat Bettinson



▲ In window mode, the thumbnails and navigation buttons are windows instead of being fixed.



▲ A quick right click on a thumbnail and further image information and options are displayed.

PICTURE MANAGER PRO

Developer: J Schaefer

System Requirements:
Workbench 2 or higher, hard drive and 3MB spare RAM.

Ease of use 84%
Slightly illogical working methods and no context sensitive help.

Performance 88%
Does what it says on the tin, and does it well for the most part.

Value for money 78%
It should be more polished for this kind of money.

OVERALL
Solid image management tool needing some polish.
83%

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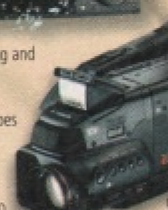
Select any video source with S-VHS or composite output. This could be your camcorder, TV with SCART output, satellite receiver, domestic VCR/player or standard TV signal passing through your VCR/player... the choice is yours.

STAGE 2

With ProGrab's software, select an image you wish to capture using the on screen preview window and Grab (because the hardware grabs frames in real time, there's no need for a freeze frame facility on the source device). Once grabbed, simply download and view the full image on your Amiga screen. ProGrab also includes a Teletext viewing and capturing facility from either TV or satellite sources.

STAGE 3

Use the 'grabbed' image with your favourite word processor, DTP or graphics package. ProGrab really does make it that simple!



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- Saves and Loads images in IFF/ILBM, IFF/ILBM24, JPEG, BMP, PCX, and TARGA file formats. ProGrab saves animations as Anim5 files and animations with sound (requires PCMCIA interface and separate sound sampler) as Anim5 + 8SVX files. A range of image processing effects, palette computing routines (AGA only) and dithering methods are featured in ProGrab Version 2.6.x. Photogenics fully supports ProGrab with a custom 'Loader' to enable grabs directly from within the program - this direct input method will save YOU more time when handling large images.
- Software has built in mono and colour animation facilities. Number of frames is dependant on Amiga RAM.
- Release 2.6.x software now includes...
  Additional Teletext Facilities - with either terrestrial or satellite TV signals.
  Larger Preview Window - double resolution and four times area of previous ProGrab software.
  International Support - now compatible with composite PAL, SECAM and NTSC - straight from the box.
  Larger Preview Window - double resolution and four times area of previous ProGrab software.



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and is supplied with just about everything you'll need*...

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- Latest ProGrab Version 2.6.x Software
- Mains Power Supply Unit
- Parallel Port Connecting Cable
- User Manual
- Input sockets for Composite and S-VHS.

** A video source cable will be required to match your own equipment - ask us for details.*
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ProGrab supports any Amiga with Kickstart 2.04 or later and a minimum of 1.5Mb free RAM.

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- Improved animation speeds of up to 11fps (mono) and 3.5fps (colour)
- Saving of animations direct to your Amiga's hard drive
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PCMCIA Interface LOWER PRICE! **£29.95**

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ProGrab™ - Amiga Shopper 95% STAR Buy and remarks like... "Sharp, crisp and faithful to the original colours, we were mightily impressed" and... "Highly Recommended. Whether you are a Videographer or a Graphic Artist, look to the ProGrab 24RT Plus. It's a winner" Hi-Fi Stereo Sampler - Amiga Shopper 92% STAR Buy, April 1997.

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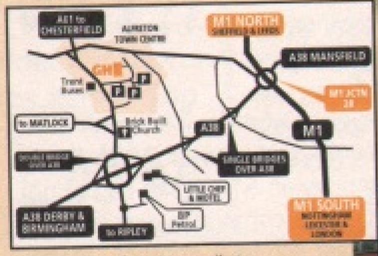
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Apollo 630

■ Price: £99.95 ■ Supplier: Eyetech Group Ltd. © +44 (0)1642 713185

This new accelerator for the A600 sports a 68030 running at 33MHz with a full MMU, an FPU and a SIMM slot for the addition of up to 32Mb of RAM.



► **A neat, well put together board which actually stays in place. What more could you want?**

The A600 was a machine that was never meant to be expanded very much, and thus there is no provision on the motherboard for an accelerator. The A500 had an expansion bus which allowed accelerator connection. More recent models have a specific accelerator slot. There are other ways to skin a cat, however, as the Viper520 last month showed.

The A500 had a Motorola 68000 CPU in a standard DIL socket. Installing the A520 involves pulling the chip out of the socket and slotting the pins on the bottom of the accelerator into it, replacing pin for pin the functioning of the 68000 with the much faster board. Even this technique is out with the A600, which used a much smaller surface mounted version of the 68000. The only way anyone has found to slot into the motherboard is to clip a PLCC socket, inverted, over the 68000 chip. The socket is connected to the board with the new CPU on it.

Throw a Wobbly

The problem with this approach is that you end up balancing a circuit board on a small socket jammed onto a slim-line chip. Users of the old Apollo 620 found this to be a major problem, with the board frequently overbalancing and slipping off the chip.

The Viper clipped on more efficiently and was shaped to better lodge onto the board, but it was still not perfect. Eyetech have employed their famous velcro to make sure this card suffers none of these problems. A few stickdown pads and stand off spacers give this board the extra support pillars it needs. A small capacitor right next to the CPU requires a corner of the socket to be shaved, and in installing I found it necessary to shave a little bit more, but this is an easy task with a sharp knife. It is a fairly ugly solution to look at, but once you've closed the box, the only thing you'll notice about Eyetech's solution is that it works. While you are not advised to turn your A600 upside down and shake it about, there is no doubt that this card offers a lot more physical stability than the others.



▲ **This AIBB Dhrystones test compares this board with a basic A600, a basic A1200, a viper 630 and an A4000/40. 1=A600 performance.**

The 68030 on the board we were sent had the advised clock speed scratched off, which makes you wonder, but In operation there were no problems at all. Functionally this is very like a standard A1200 accelerator card. It goes fast - a good few times faster than an unaccelerated A600 anyway, if not up to the level of the average expanded A1200. The FPU maths co-processor means that rendering and fractal software, for instance, will speed up very significantly.

In a real advantage over its rival the Viper 630, it bears a SIMM socket. SIMMs are very cheap right now - it would cost you only around 60 to buy yourself the 32Mb maximum this board can take. In comparison the Viper's memory cannot be expanded; they are sold with either 4 or 8 Mb fixed.

For You?

The big question is whether it is worth paying out a hundred quid for your A600. For that kind of money an A1200 can be bought second hand, and a comprable accelerator for that would set you back another 80 new. Certainly just getting yourself the Apollo 630 would be cheaper, but the other option gets you a new computer with AGA and a lot more expansion potential. If you are thinking that you don't want to bother buying a new computer until a new model of Amiga is released, but need some more power, then this becomes a tempting choice. If you keep your A600 because it is small, and you only need to run your word processor faster when you have a few fonts on the screen, then again it is tempting, but for many it would make more sense to keep the cash and upgrade later. Assuming you have decided you want to spend some cash on souping up your A600, the choice becomes somewhat more straightforward.

The Apollo A630 and the Viper 630 have little to choose between them on price, the choice comes down to the hardware. If you want that little extra speed, the Viper is the faster card. If the ability to expand beyond 8Mb and the security of a more physically stable card is important, this card is for you. It'll make your machine fly compared to an unexpanded A600 – Suzanne, the portable Amiga made by Simon Archer and detailed in our October issue, would love this card. ■

Andrew Korn

APOLLO 630
Developer: ACT

System Requirements:
A600

Ease of use Rather fiddly to fit, but instructions are very good.	84%
Performance Seven times faster than an standard A600, and takes 32Mb.	90%
Value for money Fair price for what you get, but more expensive than its main rival.	85%

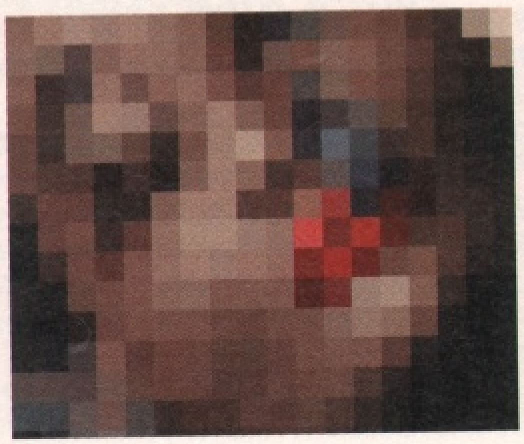
OVERALL
A good piece of kit with real advantages. **88**

Wildfire 5 PPC

■ Price: 299DM (Amiga) 399DM (PPC) Approx £120, £160 ■ Supplier: Oberland Computer, Germany
■ ✆ +49 (0) 6173 6080 ■ E-mail: info@oberland.com

All of a sudden PowerPC is a reality and Wildfire is one of the first applications to be released to take advantage of it.

▶ Many of the effects and transitions don't come across well in stills. Here's one that does but there are plenty more dynamic alternatives.







You know the old addage that goes something like "hardware is only as good as the software that runs on it"? That's going to ring true for phase 5's new PowerPC-based PowerUP accelerators. As you might expect, the march is being lead by graphics software – applications that stand to gain significantly from the enormous increase in CPU power. Wildfire is a prime candidate, and this, the first commercial release of the package, supports both 680x0 and PowerPC Amigas.

Demos

Wildfire has emerged from the demo and shareware scene into the commercial sector. You may remember a couple of stunning demo animations we featured on our April 96 and November 1996 issue CDs (Dataworld and Wild Summer). These were both edited to their final states from pre-rendered animations using early versions of Wildfire.

There's nothing quite like Wildfire, but if you could imagine a combination of Adorage and Main Actor, with a dash of ImageFX you'll have some idea of what's on offer. Like Adorage with its SSA (Super Smooth Animation) format, Wildfire also has its own special animation format called YAFA (there seems to be no explanation about what it stands for). It's a kind of IFF anim format but has additional features such as variable rates of compression to allow for playback speed to be traded off with storage size.

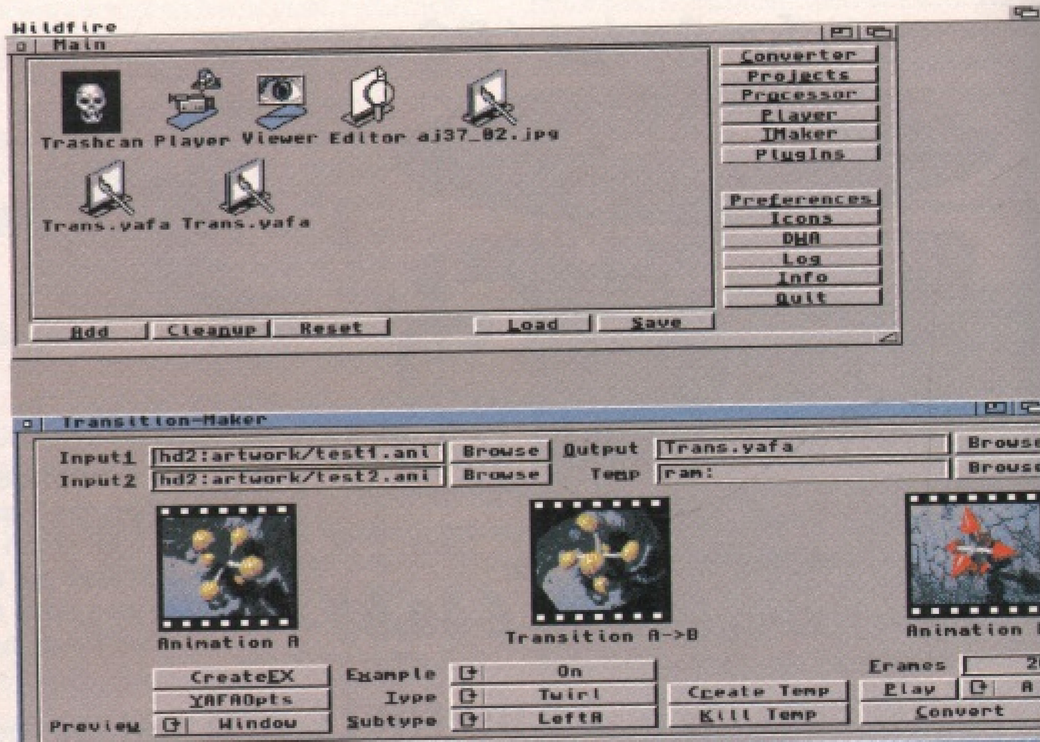
Unlike SSA which can only be output through the Amiga's internal graphics hardware, YAFA anims can be used with CybergraphX systems too. The YAFA animation format is optional so if you don't like it you can simply ignore it.

Learning to walk

Your first steps with Wildfire are likely to lead you round in circles. Whenever I first try out a new software package, instinct always ushers me to the Open selection of the Project menu, but Wildfire has no pulldown menus at all. This in itself can be quite disorientating – where do you start? The reason given for the lack of menus is that a) the AGA chipset is too slow to display them in high colour screen modes (!) and b) there's



▲ One of the features of the YAFA animation format is its ability to replay at double size to allow full screen movies with low storage overheads.

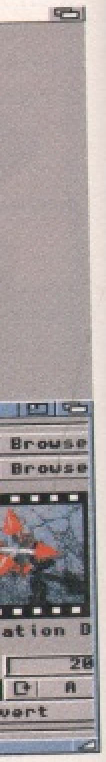


▲ The Transition Maker gives a realtime example of each wipe with the aid of animated thumbnails.

PowerPC support

When run on a PowerPC Amiga (a Cyberstorm PPC 604 in this test) it shifts through its effects processing at quite a speed. Single frames are warped instantly, while sequences zip through the system with no thumb-twiddling required. It's a different story on a slower Amiga though. A Cyberstorm 060 takes care of things quite acceptably, but an FPU is almost essential and a 50MHz 030 is bare minimum if you've got any kind of reasonably large projects to deal with.





just too much in the program to be able to fit it all neatly into menus.

I'm not convinced. You could use Wildfire on a fairly low colour AGA screen (say 16) in Multiscan mode and it would be quite useable (you can always switch to a different screen to view your high colour results). That would allow for the use of menus and keep everything a lot tidier.

It comes on a CD (no English manual sa yet) with just AmigaGuide documentation. Fortunately the CD is also loaded with plenty of examples and some impressive YAFA animations. Read the documentation enough times and you'll eventually find out how to load a picture or an animation, then apply some effects to it.

Wildfire is by no means the worst offender I've come across – at least it uses standard windows, requesters, sliders and cycle gadgets. It's just that it all seems a bit haywire. No doubt once you know where everything is it'll all come as second nature.

Animations

Enough of the interface. Let's talk about what it can do. Primarily it's an animation editing system. That's not to say it creates animations from scratch (although it's good at stringing together stills into a sequence). The lavish 3D of those Wild Summer and Data World demos was not the work of Wildfire, but Wildfire handled all the fades where one scene merges into another, the screen gets wrapped onto a spinning cube and all that kind of stuff. Wildfire also converted them to YAFA format.

One of the best and more easily fathomed features is the Transition Maker. This takes two previously created animations (anim or YAFA type) or two stills and makes a new (YAFA only) animation by fading from the first to the second in one of a variety of ways. For each type of transition there's an thumbnail example animation which can be viewed as you cycle through the list. You can set the amount of frames for the transition and that's about all you need to do. It's a shame it's limited to outputting YAFAs only, but you can always convert them to standard anims if required using the Convertor section.

Processing

The more unique aspects of the program come to light in the Processor department. This is where all those fancy 3D mapping effects are made. Some of the effects require something in the buffer to act as a kind of alpha channel, while others will work with just a single animation or picture.

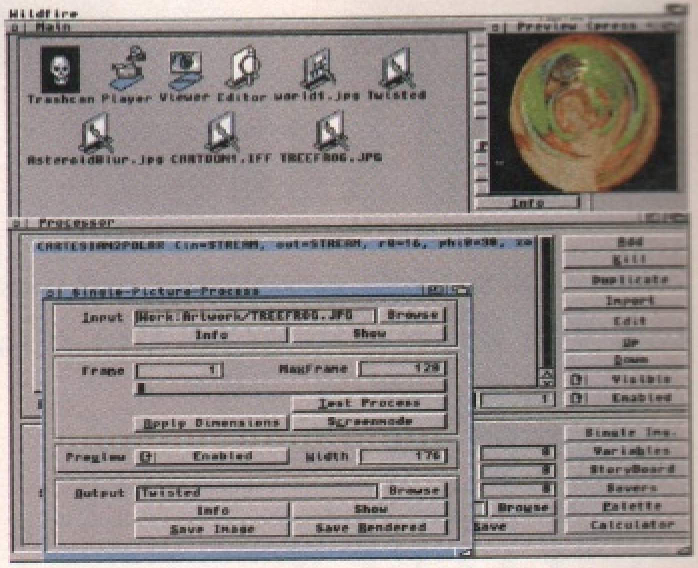
You can have an optional preview of the effect in a window on the main working screen or just dive straight in and process your full project. Most of the effects have quite a few variables that can be adjusted using sliders and cycle gadgets. Some of the best can turn pictures and animations into waving flags, spinning cuboids and circular sine wave ripples.

Presentation

While this is undoubtedly a very powerful and indeed unique piece of software, it looks like something that's evolved from a tool that wasn't initially designed for public consumption. What goes on behind the scenes is clever and has many uses, so it's a shame the presentation isn't a lot better. There are times when it can be infuriating, such as when you click on a button and nothing happens – it doesn't do what you want it to do, but neither does it tell you why it's not responding. It's also got a few bugs and crashes intermittently.

I don't want to go on a user-interface crusade, but user-friendliness is just as important as features. Let's say you were in the market for a fast new luxury sports car with all the latest gizmos. You get into the driving seat and instead of the usual arrangement of gear stick, pedals, steering wheel and indicator/wiper switches, you're presented with something that looks like the cockpit of the Space Shuttle. Hardly ideal is it?

Why not take that Jaguar XJS instead? That's got everything at your fingertips and a normal gear shift.



▲ This is the Processor section, in which Wildfire resembles an image processor along the lines of ImageFX, except that it can handle animations as standard from the main program. This is one of more more CPU-intensive parts in which the PowerPC code really makes a big difference.

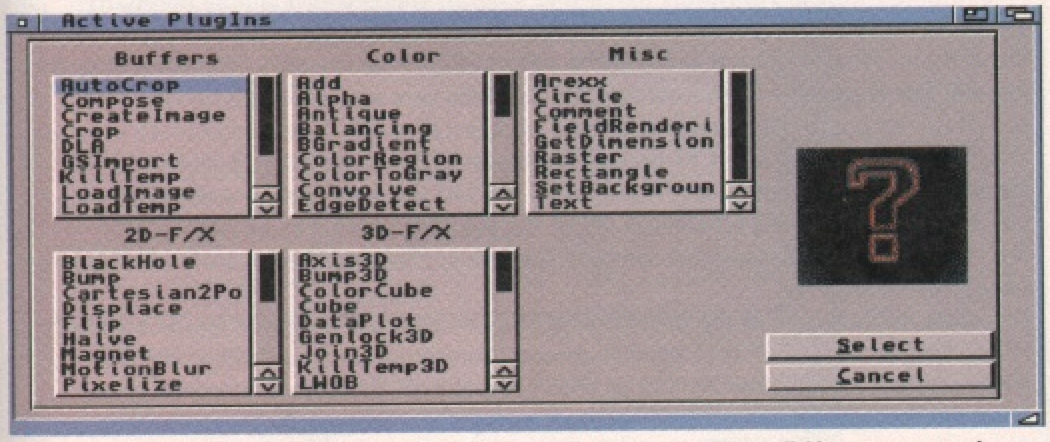
Conclusion

Before Wildfire can be ushered into the hall of fame it needs to be re-designed with a more disciplined working environment.

If it didn't show so much potential then I wouldn't bother giving it such a hard time over this, but it's obviously got plenty to offer. Also, as one of the first PowerPC Amiga applications it's inevitably going to be held up as something of an ambassador for the new breed of Amiga software, so it would be good to show PC and Mac users just what they're missing out on.

Regardless, if you're serious about making dynamic and eye catching animations, Wildfire should definitely be investigated. You can take a look at the shareware demo on the Aminet and this month's CD to get an idea of it for yourself. ■

Tony Horgan



▲ The selection of effects and plug-ins is impressive. There's about twice as many available as you can see here.

WILDFIRE 5 PPC
Developer: WK-Artworks

System Requirements:
68020 (at least 030 or PowerPC recommended), AGA or graphics card, 4Mb RAM, CD-ROM drive

Ease of use 65%
The weakest link. It gets better once you learn things parrot fashion but should be better.

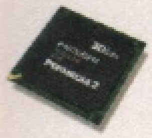
Performance 88%
Lots of good effects and on a PowerPC it's nice and fast (it would be wouldn't it?).

Value for money 70%
As it's priced at the professional end of the market, I'd like to have seen a more polished overal product.

OVERALL
A great tool for imaginative animators but needs tidying up.
79%

Permedia 2

phase 5's PPC graphics cards are based on the Permedia 2 video accelerator. We take a look at the chip which could revolutionise the Amiga.



▲ **Here's the powerhouse behind the phase 5 card, the Permedia 2 chip from 3DLabs.**

A lot of excitement has been engendered by the announcement of phase5's planned release of a graphics card for their PPC accelerators which includes one for their BlizzardPPC line of A1200 cards.

Much excitement has been at the thought of many A1200 owners, who'll at last be able to get a graphics card. Also, it doesn't cost a lot; the Cybervision version priced at 549DM or £219, and the Blizzardvision 499DM or around £200. The story is that it's going to be better than a Picasso 4, too. Prepare for a shock – it's going to be *loads* better.

The Permedia 2 is a new generation of graphics chip. Older chips just chucked pixels at the screen, these newer models have a lot of computing hardware in them for generating 3D imagery. The most common use of this kind of hardware is in games, and such chipsets can be found in Playstations/ Nintendo 64s, enabling high quality, fast 3D with relatively low powered CPU's.

Many PC gamers these days will also have a 3D graphics board plugged into their computers, the current favourite being the Voodoo 3dfx based cards, which are capable of producing stunningly smooth 3D graphics. A major use aside from gaming is for artists working in 3D graphics. With one of these 3D accelerator cards doing the difficult part of the job, objects can be rendered, shaded and lightsourced in real time in the preview window of a 3D graphics/animation package, making it much easier to see immediately the effects of any changes you make.

OpenGL

The most common system of addressing 3D graphics is the "OpenGL" API. This cross platform graphics standard is well established in the professional graphics market, but has faced a strong challenge recently from Microsoft's Direct3D.

High end graphics cards and Graphics workstations tend to support OpenGL, as does software such as Lightwave 5.5, but the truth is that games call the shots in the war of hardware upgrading. Here Direct3D looked very strong, but id Software championed OpenGL with their GL version of the market leading software package QuakeGL.

Where Quake and id go, the industry goes. As part of the CybergraphX retargettable graphics system, since version 3 phase5 have shipped CyberGL, an Amiga version of this 3D graphics addressing language.

This was originally developed to go with the 3D chip on the Cybervision 64/3D card, but never got very far with that. The Cybervision 64/3D uses a primitive 3D chip called the S3 Virge. The performance of the Permedia 2 is so far ahead of the Virge it wasn't even worth our while trying to scale the performance of the older chip onto our benchmark graphs.



▲ **Games running on Permedia 2 could look like this.**

2D Too

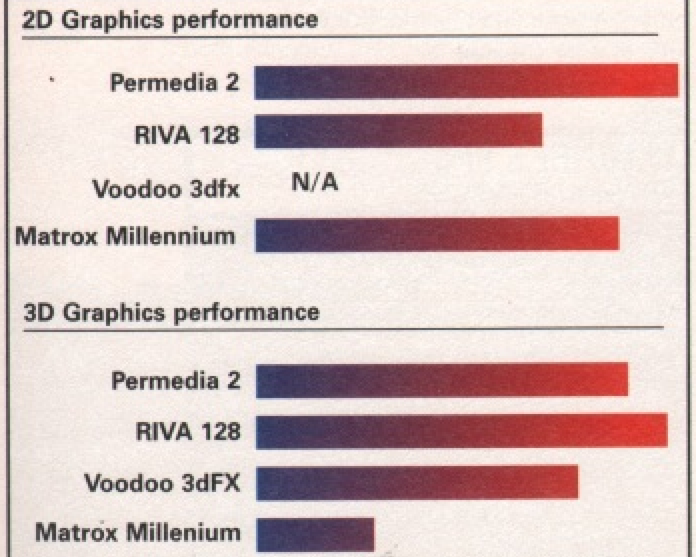
Unlike the Voodoo but like, for instance, the acclaimed Riva 128 chip, the Permedia has great 2D performance too. With 4Mb of 64 bit wide SGRAM specified for the phase 5 graphics card, it does 1280 by 1024 screens in 24bit truecolour at 85Hz, or 1600 by 1200 in 24bit truecolour in 60Hz (NTSC rate).

Compare it to the specs of any current Amiga graphics card and you'll see the value of the 800Mb/s access speed for the local video RAM and a RAMDAC running at a fast 230MHz. 3D graphics is one of the fastest growing areas of computing today, and Permedia 2 is a solid choice by phase 5.

With hardware like this the Amiga will be an extremely tempting hardware platform for 3D graphics artists, and would be more than capable of running any game you care to think of. Interesting times ahead! ■

Andrew Korn

How good is Permedia 2?



These performance graphs show the Permedia 2 to be very much at the head of the field, but as with all benchmarks, we advise caution. Other benchmarks place the Permedia slightly below the 3dfx. Source – 3DLabs.

The hardware

The hardware specs are impressive. The Permedia 2 has a 16 bit Z buffer, a 230Mb RAMDAC, and an 800Mb/s interface to SGRAM video memory. It is capable of hardware gouraud shading, anti aliasing, stencil buffers, Alpha blending and Pixel fogging. The chip is capable of 1 million texture mapped polygons per second, and 83 million textured, bilinear filtered, perspective mapped pixels per second... you what mate?

- **Alpha Blending: Allows opacity data alongside RGB data for transparency effects.**
- **Anti Aliasing: Reduces jagged lines by smoothing with mid tones.**
- **Gouraud Shading: Artificially generated smooth shading to a simple geometric shape, gives the appearance of a smoother more complex shape.**
- **RAMDAC: The hardware which takes information from memory and sends it to the screen. The faster this is, the quicker the graphics card can draw the screen.**
- **Texture Mapping: Applying flat bitmap pictures to a 3D object to simulate textures.**
- **Trilinear Mip-mapping: A technique for processing texture maps which involves horribly complex calculations. Interpolated the bitmap data to map smoothly onto the 3D shape and avoid blockiness when the shape is viewed close up.**
- **Z-buffering: Stores depth information for pixels, allowing hidden surfaces to be easily calculated.**

For more information on the forthcoming phase5 card, call a phase5 dealer such as White Knight on +44 (0)1920 822321, Power Computing on +44 (0)1234 851500, Blittersoft on +44 (0)1908 261466 or Weird Science on +44 (0)116 2463800. If you have internet access call up www.phase5.de for more information.

PD Scene

Stevie Bye has been a good little boy this year by the look of it, as Santa's given him plenty of games for review. Are they any cop though...?

★★★★★	**Totally blinding**
★★★★☆	**Good**
★★★☆☆	**Average**
★★☆☆☆	**Substandard**
★☆☆☆☆	**Oh dear**

Kangy

■ **Type:** Platform

■ **Available from:** Saddletramps PD. 1 Lower Mill Close, Goldthorpe, Rotherham. S63-9BY. Tel: 01709 888 127

■ **Price:** 80p plus 50p P&P

Kangy is a good looking but standard platform romp, presumably for kids. The idea is to guide Kangy the Kangaroo, complete with boxing gloves, up the screen to the exit whilst avoiding or punching out the nasties and of course picking up the goodies.

Almost straight away you feel that Kangy should be able to duck down, all through the game I had urges to duck below a nasty rather than bop it one and risk losing a life. If the game is meant for kids it is quite hard and I am sure exasperation will soon creep in for any kid having a bash at it.

Just to make life even more difficult there are lots of badger type baddies that you can't kill and there is a time limit.

But the most annoying part of the game is the boing sound effect every time Kangy jumps, it drives you mad. On the positive side you do get 5 lives to play with and the collision detection is pixel perfect. There's not that much more to the game; you collect all of the fruit on each screen and then put it in the collection boxes, avoid badgers and birds, look at the lovely graphics and turn the sound off.

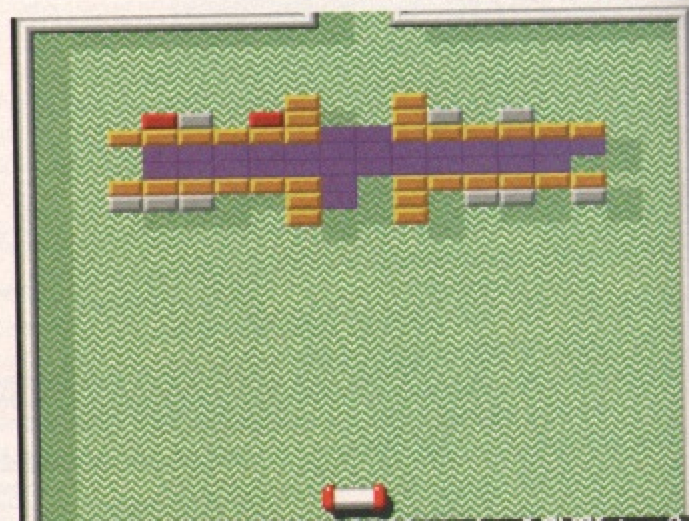
Kangy is possibly a good game that most kids will like the look of but it's marred by unnecessarily difficult gameplay – considering the target audience. It's a bit of a shame that really. If the first few levels were easier to complete the game would suck the player in immediately and Kangy would be a hit with the kids, probably. ★★★☆☆

Choki The Cyberpet V1.05

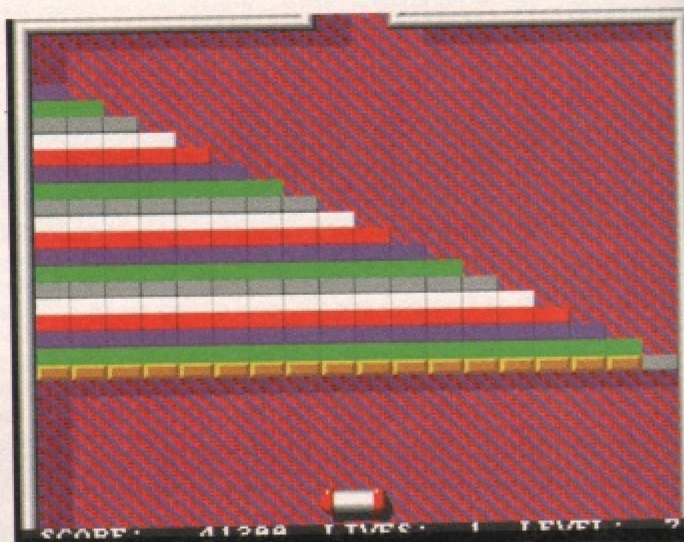
■ **Type:** Simulation.

■ **Available from:** Classic Amiga PD, 11 Deansgate, Radcliffe, Manchester M26-2SH Tel: 0161 723 1638

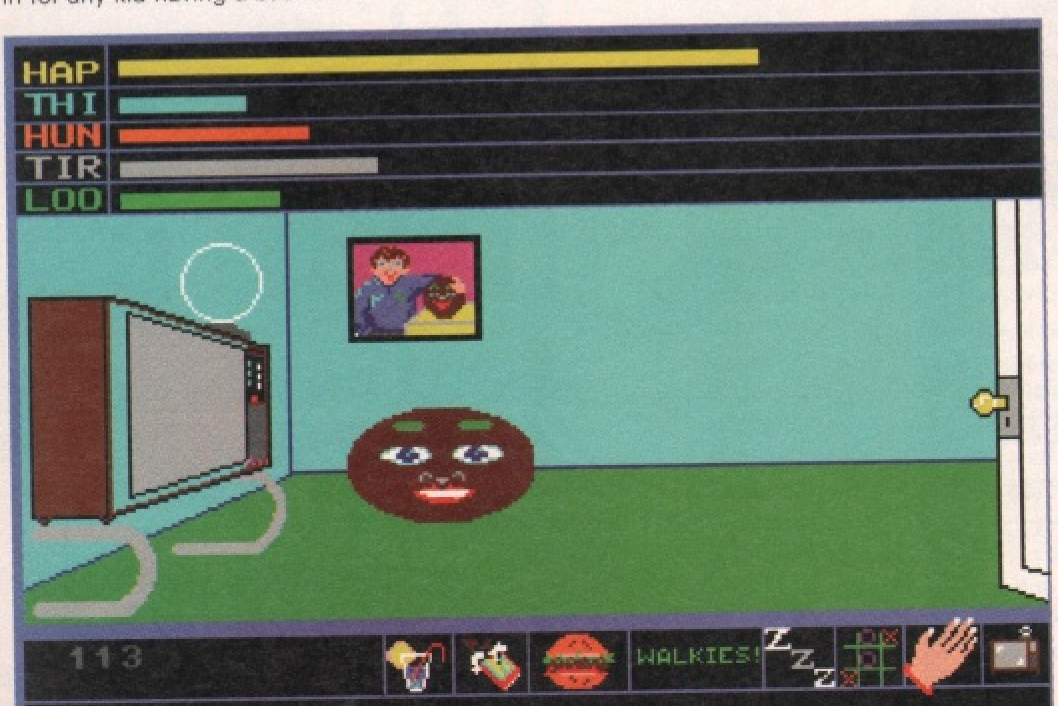
■ **Price:** £1 plus 75p P&P per order.



Brik Fighter



Brik Fighter



Choki the Cyberpet

It had to happen. You can now rear a Cyberpet on your Amiga. Even though the Cyberpet craze is about as fashionable as flares the programmer of Choki has seen fit to foist this 10 minute piece of programming onto a totally innocent Amiga public, wicked man.

For those of you lucky enough not to be familiar with the creatures I will expand further. A Cyberpet 'lives' on your computer and you have to look after it by; taking it for "walkies", feeding and watering it, making sure it gets a good nights' kip, goes to the toilet etc... . In this particular version to keep Choki happy you let it watch TV, makes perfect sense to me. Top of screen are five meters displaying Choki's; happiness, thirst, hunger, tiredness and cross leggedness.

The idea of the game is to keep Choki's happy meter high and the others low. You

achieve this by clicking on the drink icon when he's thirsty and the hamburger icon when he's hungry etc. Apart from bad sound effects and abysmal graphics that's your lot.

Hardly going to tax the old grey matter is it? In Choki's defence you could argue that the program is just a bit of harmless fun, the only problem is that it isn't, Choki is pants. In fact I think I would have more fun at a train spotting convention for the blind. If you can get more than 30 seconds of fulfillment out of Choki then I feel that you should seek medical advice. ★★★★★

Brik Fighter

■ **Type:** Break-out clone

■ **Available from:** Saddletramps PD. 1 Lower Mill Close, Goldthorpe, Rotherham. S63-9BY. Tel: 01709 888 127

■ **Price:** 80p plus 50p P&P

Brik Fighter has been updated and re-released as Freeware. It's an Arkanoid/Break-out clone, even the level designs look the same as the original Arkanoid. It has all the bonuses like; expanding bats, shooting bats, double bats, multiple balls, level warps etc.

The gameplay is extremely smooth, very playable and, it must be said, quite addictive. Unlike a lot of similar clones I have played the author has succeeded in applying a realistic angular deflection when the ball hits the bat, which means you do actually have a small amount of control over where you want the ball to go, and you don't get stuck with one brick in the corner of the screen for three days. There's little more to be said, you've seen it all before in a hundred or so other clones, but Brik Fighter is at least one of the better one's. ★★★★★

Gremlons

■ **Type:** Game collection

■ **Available from:** PD Power 15 Lovetot Avenue, Aston. Sheffield. S26-2BQ Tel: 01374 150972

■ **Price:** 50p +75p P&P

This disk of games is entitled 'Useful Utilities-Gremlons' which should give you some idea of how this review is going to go.

The supposed star of the disk is a game called Gremlons which is possibly the worst game I have ever 'played' in my life on any computer, ever. It pains me to even recall playing it so I will make it brief. You must move a badly drawn and badly animated bloke around some badly drawn platforms, collect the badly drawn blobs called Gremlons and avoid the badly drawn nasties – which are just lines with things on the end.

The colours used in the game are vomit inducing, there is no backdrop and no sound to talk of. It's horrendous in all areas and worse you have a gut churning 100 Gremlons to collect ugh! Gremlons was 'created' with The Platform Construction Kit, not a good advert for said software I think.

The other 6 games on the disk are all ancient PD games that everyone has seen before like Pong, Conquest, Klondike and Atoms. We all erased these games from our collections at least 5 years ago.

There should be a law against inflicting this sort of dross on the Amiga market, it's in a bad enough state already. Bring back hanging I say! ★★★★★

Marietto

■ **Type:** Arcade game.

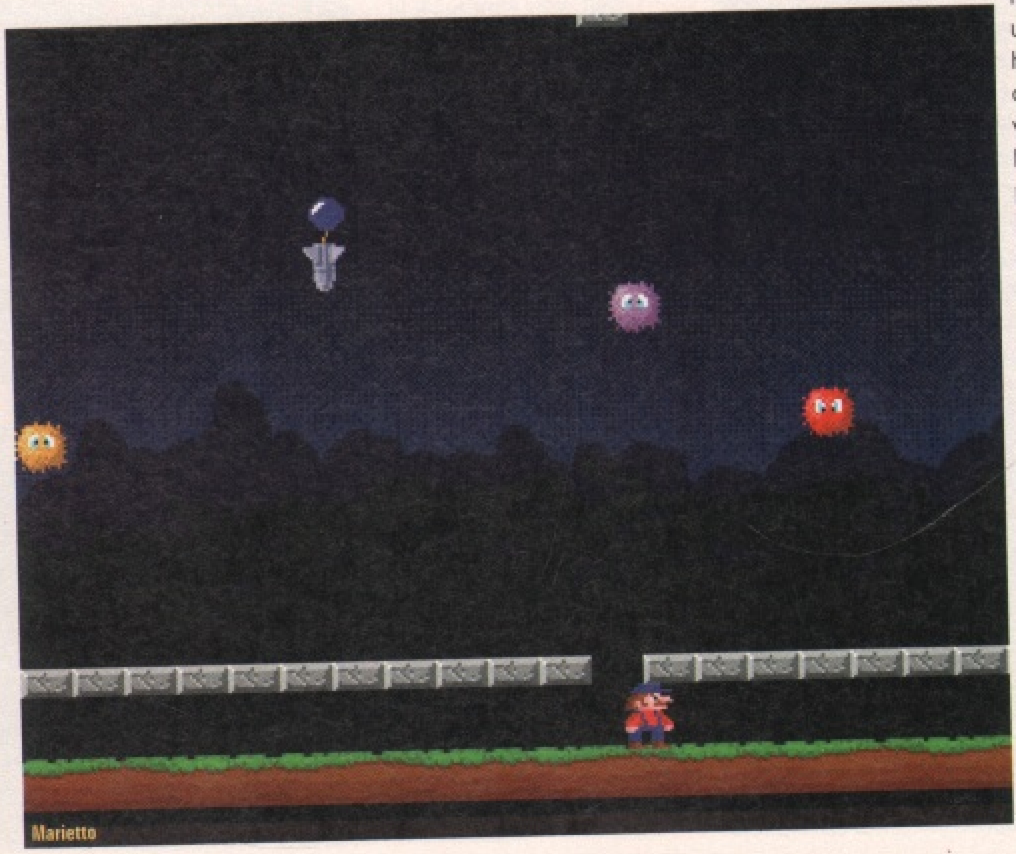
■ **Available from:** Classic Amiga PD, 11 Deansgate, Radcliffe, Manchester M26-2SH Tel: 0161 723 1638

■ **Price:** £1 plus 75p P&P per order.

The idea of Marietto is very simple. You control a Mario type figure at the bottom of the screen which you can move left and right using the joystick.

Above your head is a row of bricks, you can jump up and nut a brick to try and kill the looming baddies that swoop down at you. Sounds easy doesn't it? The catch is you musn't hit certain baddies with the bricks. Objects like boulders and knives are flung at you from the edge of the screen to keep you on your toes, which you have to kick to avoid being killed.

The swooping baddies eventually do a kamikaze on you, you can kick these as well if you are quick enough. Annoyingly though, you get only 2 lives so most games will only last a few minutes until you get the hang of it. Later on in the game you can collect bonus coins for points and the baddies also shoot at you. I have to say it, Marietto is just not my cup of rosie. I found it frustratingly hard, boring and repetitive. However, like everything in life, Marietto will have its supporters. So if you yearn for the old 8-bit style games you may enjoy this, but to be honest I've had more fun with a Spectrum emulator. ★★★★★



Marietto

CANE



■ **Type:** Thrust/puzzle

■ **Available from:** OnLine PD. 1, The Cloisters, Halsall Lane, Formby. Liverpool. L37-3PX. Tel: 01704 834 335.

■ **Price:** 75p

CANE (Cargo And Nothing Else) is a Thrust type game mixed with Lemmings type puzzles.

The gameplay is simple but addictive, again like Lemmings. The graphics are dangerously similar to that of Lemmings too, so I think we can safely assume that Lemmings has a little to do with the inspiration behind CANE. As I have mentioned the word Lemmings 5 times already I promise I won't mention it again in this review.

The idea behind CANE is to guide your Thrust type rocket around the pretty scenery collecting all manner of objects including cargo crates and 'dudes'. The dudes leap up and down to get your attention. You pick objects up by landing on them carefully and then you must tow them back to a transporter. The amount of cargo that has to be collected is displayed on the score-line.

There are also goodies to collect to help you such as; bombs, fuel and anti-gravity devices.

This demo version has 8 levels to whet your whistle – the full version costs a very reasonable £6 and, according to the docs, offers many advanced functions and levels not featured here.

I loved the music in this game, the sound effects are good too, though you have heard them before, somewhere!? But best of all what I really liked about CANE was that your rocket doesn't get blown up as soon as you touch a foreign object (which often happens in this type of game) and you have a shield which can be topped up. In addition you also have limited fuel to add a little touch of spice to the proceedings.

CANE has been written and well programmed in Blitz Basic, the scrolling is smooth enough and the inertia of the ship is spot on... this programmer sure knows how to write a game. CANE isn't the most original game you'll see this month but it has a touch of class and professionalism about it, a bit like Lemmings. Oops... very sorry! ★★★★★

PD Utilities

Once again here's Steve Bye with another bundle of goodies from the world of public domain software. Feast your mince pies on this little lot then!

★★★★★	Totally blinding
★★★★☆	Good
★★★☆☆	Average
★★☆☆☆	Substandard
★☆☆☆☆	Oh dear

Diz Explorer

■ **Type:** Archive interface

■ **Available from:** Aminet and all good PD suppliers.

■ **Price:** N/A

Diz Explorer has been designed mainly for the handling of archives. It recognises 13 different archivers: LZX, LHA, LZH, LZ, LX, DMS, ZIP, ARC, ARJ, SIT, TAR, EXE and RAR, which just about covers all the file types you are likely to come across on the Amiga and PC. This could be very useful when downloading PC software to your Amiga. To decompress any of the supported archive types you just select the file and click on 'Uncompress'. The program also supports archive conversions which is useful if you have say ZIP files on your Amiga, just select the file or even a whole directory of archives and tell Diz Explorer to convert them to LHA, LZX or any other format and it will all be done for you automatically. DE also supports most forms of file ID's. These are small ASCII files usually contained with or within

Utility of the Month...

Scion

■ **Type:** Genealogical database

■ **Available from:** OnLine PD. 1, The Cloisters, Halsall Lane, Formby. Liverpool. L37-3PX. Tel: 01704 834 335.

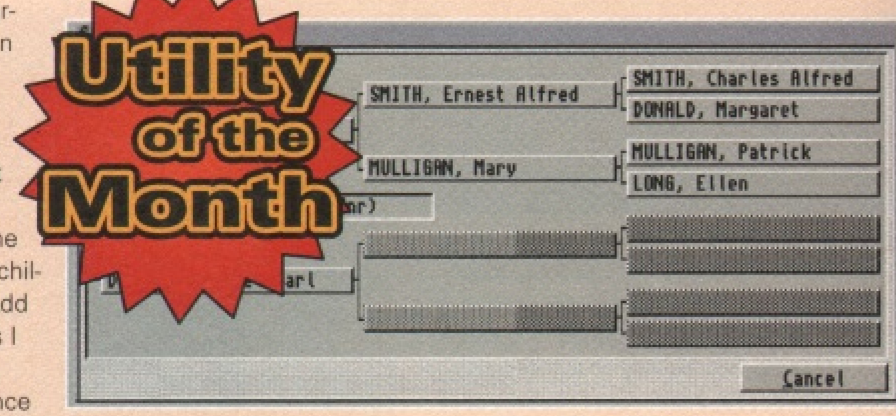
■ **Price:** 75p

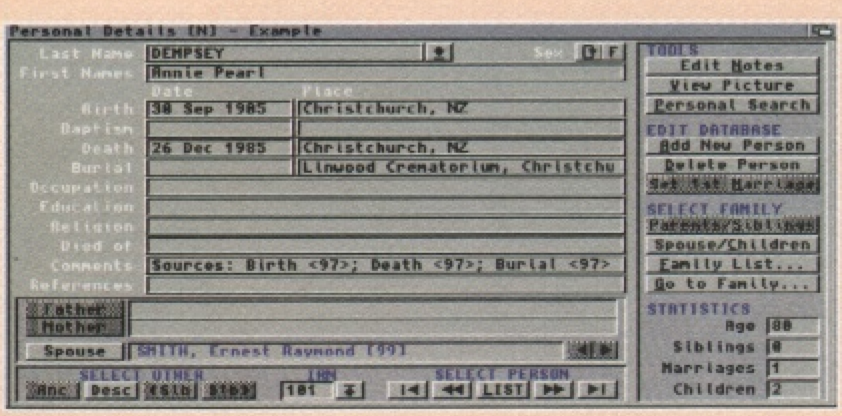
The term defined in my dictionary under 'scion' says 'descendant, heir' which should give you are fairly good clue of what this program is about. It's a database for keeping track of genealogical information, ie, A family tree.

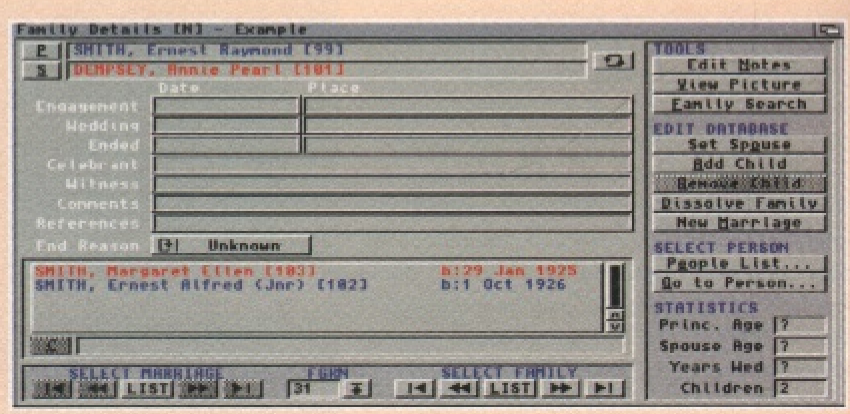
It has many excellent features including support for IFF picture files, free form notes, printed reports and on-line context-sensitive help. Scion is Freeware and has been around for some years, but luckily has seen many bug fixes and revisions. This latest version (V4.09) seems to have mopped up even the tiniest of bugs and I would be surprised to find any bugs at all in this well written program. A few years ago I did have a go at defining my family tree with Scion and I can tell you the research you need to undertake can be quite heavy going once you have finished covering your living relatives, but it is also very interesting. For example I was shocked to discover that on my Grandfathers side almost all of his immediate male relatives were killed in the first world war and I had a great, great uncle who was an inventor. I won't go into what some of my ancestors supposedly got up to though! I never completed the tree properly as there were just too many missing links but it was riveting stuff and Scion held up well, I just wish I still had the data. Scions' front-end is extremely easy to use, you don't need to read the instructions, but a quick skim through the guide would be sensible. To start a tree you simply click on 'Add New Person'. You can start a tree at any point, so if for example you were creating your own family tree you could start with yourself, you simply fill in the point and click form with your personal details. If you are married you just click on '1st Marriage' then fill the details. If you have children just click on 'Add Child' and so on. As I said, it is all very straight forward. Once you have entered some data Scion can produce progeny charts to your printer or the screen.

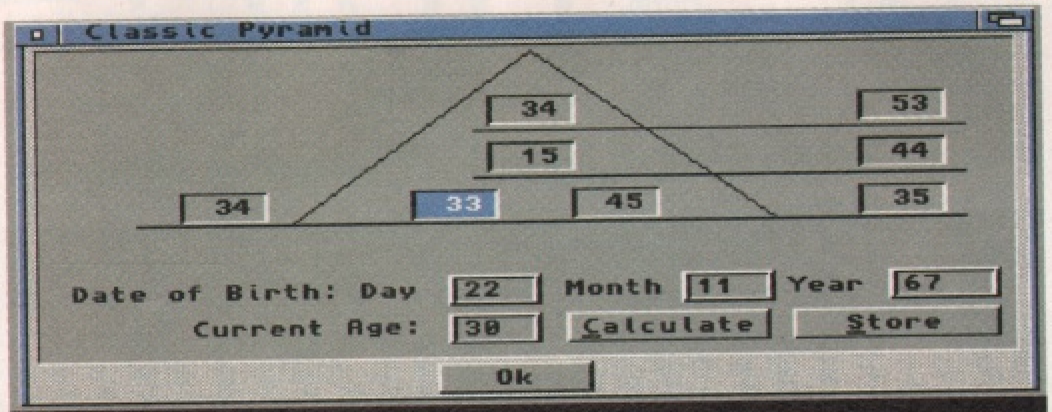
Scion can even handle multiple marriages, unconventional marriages, adopted children and unmarried parents. And just to make sure everyone is happy there is a flexible search option, locale support, multiple ARexx ports, support for virtual memory, runnable on Pal or NTSC from floppy or hard drive. I tried very hard to find something to criticize about Scion to balance this review, but I just couldn't find anything.

Scion is a superb piece of Amiga software that makes what would otherwise be a complex task into a pleasure. ★★★★★









Lottery Predictor V2.8

an archive, the extensions supported are: TXT, DIZ, NFO, INF, INFO, DOK, DISPLAYME, READ, DOC, README, TEXT and GUIDE. If when you select an archive a file ID is found, the contents of the file ID will be displayed in Explorer's window.

It's very useful for skimming through a lot of archives, say on a CD for example. There is also support for Aminet archives. Other time and hassle saving features are Diz Explorer's 'Mount RAD:' and 'Mount FFx:' options, you can now mount these devices with a click of the mouse. Then there is a file list creator for directories or devices, and launch, copy, move and delete files. DE will be useful for handling unusual archive formats and painlessly mounting RAD: it's nothing earth shattering but a useful utility to have in your collection. ★★★★★

The Lottery Predictor V2.8

■ **Type:** Lottery prediction

■ **Available from:** OnLine PD. 1, The Cloisters, Halsall Lane, Formby. Liverpool. L37-3PX. Tel: 01704 834 335.

■ **Price:** 75p

No, not another Lottery Predictor I thought, although I initially liked the look of this.

It's written in Amos but using an extension called AWE. AWE has a few minor problems but overall most non-programmers won't notice the difference to normal Intuition programs. The program itself has a dazzling array of features which I do not have room to list here but the Perms and Number Wheels features are useful and you can view stats from the draws in many variations. The program comes with a data file that covers the first 127 draws to March 97, which includes Wednesday draws.

I decided to update the file but soon realised there are errors in the data file; the first is that the numbers for draw 125 are completely missing which caused me a headache, I had to renumber 30 draws because of it. When I ran it again the draws were corrupted and the program refused to recognise anything past draw 121. I reverted to the original data file and entered all the draws up to 161 by hand in a text editor. I ran the program again and the draws were still corrupted. I then got yet another kick in the teeth, this demo will only take 150 draws max – which it doesn't say in the docs.

I am just glad I didn't enter all the draw numbers to date, what a waste of an evening. I soon realised the program was bugged beyond use. It seems to replicate draws; whether this is because of the data file or the programming itself I do not know. It's possible someone other than the programmer messed with the data file before I got hold of it as I can't believe the programmer wouldn't have noticed a huge problem like this. When the bugs are ironed out TLP could be worth a look though. ★★★★★

Sweet Cheater V5

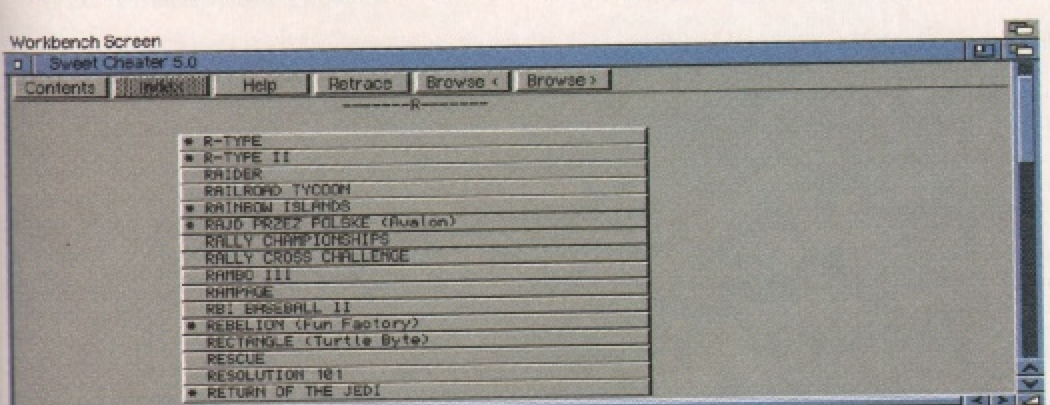
■ **Type:** Database of cheats

■ **Available from:** OnLine PD. 1, The Cloisters, Halsall Lane, Formby. Liverpool. L37-3PX. Tel: 01704 834 335.

■ **Price:** 75p

There are plenty of cheat lists around but Sweet Cheater has to be the best I've seen. It has cheats, hints, tips and codes for over 1000 games. The list is presented in a well constructed AmigaGuide document and it's easy to find what you are looking for.

I conducted a little experiment on Sweet Cheater, I looked up the first 10 games that I could think of, and they all had an entry – impressive. Also in SC's favour is that the author has credited his sources which makes a change. Probably the best of its kind at the moment. ★★★★★



Sweet Cheater V5

Best of Aminet

It seems that there has been a bit of a glut of games turning up this month, including a few nice looking demos of the latest Licenceware games. Football fans make your way to game/demo/euro_man.lha (439k) to try out European Manager. Take charge of one of the giants of Europe and challenge for the European Super League title. Simplistic, but fun. Gore fans should tune in to game/demo/proto.lha (677k) for an astonishingly polished looking Operation Wolf clone from Comatose. Same old *'horizontal scrolling line bad guys up in your crosshairs and shoot them gameplay'*, but with very nicely drawn graphics – a great piece of fast action nostalgia .

MP3 encoding allows near CD quality audio to be compressed into a very small space, but decoding it in real time is hard work. PPC boards come with a player which keeps it barely ticking over, but the real serious guys use hardware decoding such as is provided by the NSM truesound ISA card. If you have active ISA, using a GG2 or one of the new ISA equipped Amigas from Index, you can use one of these cards too, with the driver you will find at hard/driver/trueamiga.lha (29k).

There seems to be a bit of an alien theme amongst the artists of the Amiga world this month, with all sorts of people uploading images of alien space stations, strange creatures and weird landscapes. Top aminet Artist Francesco Gambino contributes pix/trace/alienattack.jpg (74k) to the collection.

My favourite upload this month is the wonderful but useless misc/misc/poetry.lha (84k), a random poetry generator less random and more surreal than any I have seen before. With the default text dictionary, it somehow came up with the following:

The unimaginable barrenness nurtured the guardian, / Half remembered the silent woman reached out for him, / She loved his suffering unceasingly. / Godlike, the unimaginable barrenness engulfed the unforgiven, / Unknowing, it's soul was a reflection of them, / it longed to touch their empty eyes. Great stuff, but total gibberish.



Why Apple?

One day we all hope to see the rebirth of the Amiga with a PowerPC processor and other new features to enable it to compete again with today's systems. Sadly though, more than 2 years since Commodore's demise, little of substance has actually happened. We've seen prototypes and heard promises... we all hope to see new Amiga developments.

If you can't wait and need more performance today, without paying the earth - there's only one real alternative to consider... There's never been a better time to think Apple!



Only Apple offer you both desktop and portable computers that truly match the ease of use the Amiga brought to your desktop. Affordable Apple Macintosh systems have PowerPC RISC processors with thousands of off-the-shelf programs available in areas where the Amiga was always previously so strong.

And, if you need the most compatible of all computers, Macintosh is currently the only system that can run MacOS, DOS and Windows applications via optional DOS Cards or SoftWindows software.

PowerMac 5400/180

INTERNET READY

- PowerPC 603e
- 180Mhz
- 16Mb RAM
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PM6400	200	603e	16	2.4Gb	✔8	✘	✘	✘	✘	✔28.8	Design	£974	HOME OFFICE
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PM6500	275	603e	32	4.0Gb	✔12	15" AV M/S	S/W 2500	✔	✔	✔33.6	Design	£2466	CREATIVE STUDIO
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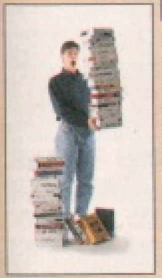
Manufacturers' specifications and GH prices are correct at time of going to press; however, they may fluctuate and we therefore reserve the right to amend them - please confirm prices before ordering. Software/Product packaging for bundled systems/items may not be included and is shown for illustration purposes

Why Macintosh?

Performance:

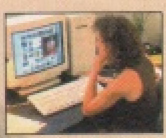
All Macs have the latest PowerPC *RISC* processors (poor old Pentium systems are still *CISC* designs). Even entry level desktop Macs run at 180MHz, with 350MHz powerhouses at the top of the range (Mac PowerBook portables offer up to 240MHz).

Software choice:



Over 1,800 native software packages (written specially for PowerPC Processor Macs) have been shipped since Power Macintosh was launched in 1994 - plus there are thousands of industry standards which can also be used. Industry standard programs such as Microsoft Word and Excel, Pagestream, Word Perfect, FileMaker Pro, Quark Xpress, Photoshop and many others were developed for the Mac.

Creativity:



- Macintosh still dominates the creative world with an 80% market share in colour publishing.
- 65% of post-production video editing is on Macs.
- Macintosh is the most widely used system for the creation of Internet web pages.
- Most magazines (including the one you're reading right now) are created on Macintosh.

Multimedia:

- Apple is the World's No. 1 Multimedia PC vendor.
- All desktop Macs have a fast CD-ROM drive as standard (many portables have internal CDs too).
- In 1995, 42 of the top 50 selling CD-ROM titles worldwide were developed on the Macintosh.
- Many Macintoshes have built-in TV with teletext so TV clips can be recorded directly to disk as QuickTime movies.
- Many Macintoshes have built-in video in and out, for direct recording to VCRs.
- Some Macintoshes have internal digital video editing facilities as standard and many others can include this facility with an easy upgrade.

ISDN, the Internet & Communication:

- Macs are Internet/e-mail ready and many include modems with full send/receive fax and answer phone. Adding an ISDN connection is easy.
- Industry standard web browsers, Netscape Navigator and Microsoft Internet Explorer, were developed for the Mac meaning Access to Worldwide Web sites is easy.
- QuickTime, the Internet's standard format for video files, or QuickTime for Windows, are both Apple products. Of course QuickTime comes as standard with every Mac.

Connectivity & Expandability:

- Unlike other PCs, all Macs have networking built in as standard, so connecting systems together and adding shared printers etc. couldn't be easier.
- All Macintoshes have an external SCSI connector as standard. Adding external drives, ZIP/JAZ and other cartridge drives, scanners etc. really is Plug-and-Play.
- Low-cost digital cameras can be plugged into the Mac for instant real image input.



Education & Edutainment:

- Being the World's No.1 education supplier, quality Macintosh titles are widely available. Dorling Kindersley offer superb packages like The Ultimate Human Body and there is a varied supply from other leading software publishers too.



- Because Macintosh is the preferred system within many educational establishments, high quality software is assured.

Recreation & Games:



- Top games like The Ultimate Doom, Myst, Rebel Assault II, Dark Forces, Descent, Afterlife, Lost Eden, Legend of Kyrandia, Full Throttle & The Dig have all been developed for Macs.

Output & Presentation:

- Connecting and using colour printers (from Epson, HP, Apple and others) to Macs is so easy and with photo quality output the results are truly outstanding.

PERIPHERALS

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INKJET PRINTERS...		**COMMS...**	
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Epson Stylus 800 A4 Colour	£351	**ACCESSORIES...**	
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SOFTWARE

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KPT Bryce II	£163	Ultimate Human Body 2.0	£27
KPT Goo!	£41	Virtual Reality - Cat, Bird,	£21ea.
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Claris Organiser 2.0	£69	Thinkin' Things 3	£14
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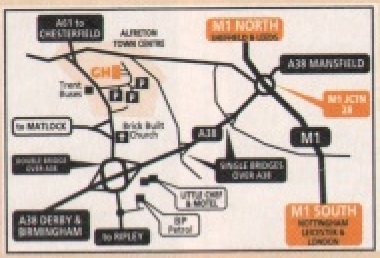
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CD-ROM Scene

Another Aminet CD, fonts for maniacs, and a multitude of games to choose from. Andrew Korn gives you his verdict...

Aminet 21

■ **Available from:** Weird Science, Q house, Troon way business park, Humberstone lane, Leicester LE4 9HA.
■ **Price:** £10.99 plus £1 p&p

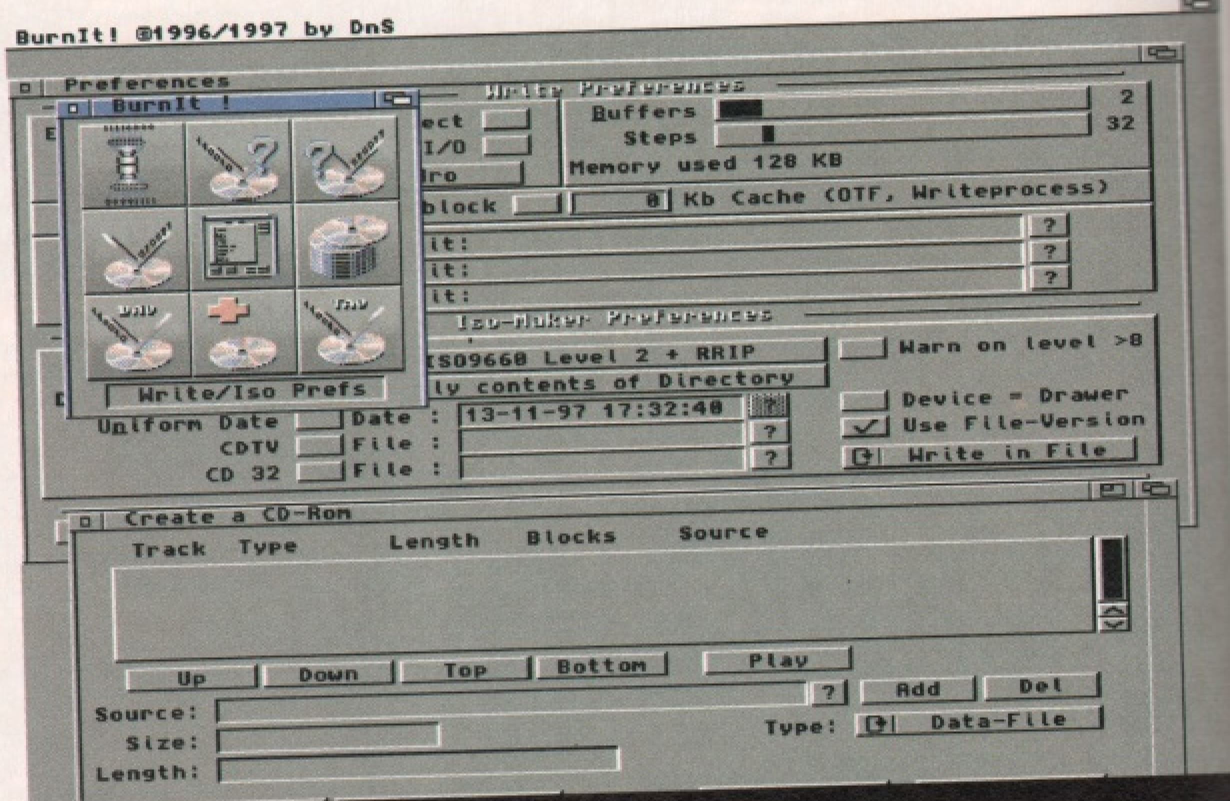
Guess what, we're going to take a look at an Aminet disc. Surely this is boring by now.

But no! Somehow the Aminet discs are still the top Amiga resource, still scaling the heights of the best sellers charts month in, month out. In years gone by, it was entirely obvious why this was the case, but with magazine coverdiscs aplenty and 20 previous Aminet discs, it's hard to believe they can still be such an essential purchase.

Sure, with all that software going straight onto the Aminet CDs, getting out one of the cheap subscriptions to the Aminet and having it posted through your door every month or so when it comes out is a way to get an unparalleled and exhaustive personal library of PD. On the other hand getting out a sub to CU Amiga CD edition gets you a library of software less completist but more selective.

Let's face it, once you have a dozen CDs full of software, you are not going to be short of programs to look through for at least a decade or two.

The lasting appeal of the Aminet CD-ROMs stems from the fact that they contain everything and make it very easy to get to it. The archive is stored in the form it is on the Internet, divided into directories and subdirectories according to the sort of thing it is. The software is stored in archive form, so it can, of course, be installed by hand via shell, Opus or similar. Alternatively you can access it either through the supplied filer, an Opus 4/SID like twin lister program which allows you to copy, unpack, view etc, or throught the brilliant powerguide index.



AMINET 21

This is basically an Amiga guide which allows you to browse through lists of the software with short descriptions. Click on a short description and it displays a longer description to you, click on the name of the software and it will unarchive to the directory of your choice or execute from RAM, or if it is a picture, animation or music file then load an appropriate player and play it. If you want to have a free reign that's fine, but there is more organisation to it than that.

There is also the option to sort through lists of files according to what was downloaded the most. The pictures can be sorted through using a small thumbnail viewer package, there are selections of demos listed according to their compatability and how highly the CD compiler rates them, and the mod collection can be accessed via author or via cross referenced style list.

Each mod is rated from 1 to 9 and there is even a nice shuffle play option. The layout of these discs has been polished and perfected over time; after all 20 previous discs certainly makes for a lot of prior experience.

So what about the content? Cast your eyes to the boxout and you'll get some idea of what is available. As always, it is a mixed bag. Some isn't worth the CD space, other bits are pretty much indespensible. This one comes with all the latest patches that have been put up by commercial companies, all the latest versions of the big shareware utils, an almost endless collection of mods, demos and graphics, discmags and so on.

There are demos of OnEscapee, Trapped2, Flying high Trauma Zero and more in the games section, the latest Burn It, Picture Manager Pro and WildFire demos in the biz/demos drawer, and plenty more to keep you going. Another installation in the irrepressable Aminet series, what more need be said. **89%**

Where's all the software of Aminet 21?

biz	32MB
comm	30MB
demo	95MB
dev	19MB
disk	5MB
docs	32MB
game	124MB
gfx	45MB
hard	1MB
misc	32MB
mods	275MB
mus	19MB
pix	217MB
text	5MB
util	34MB

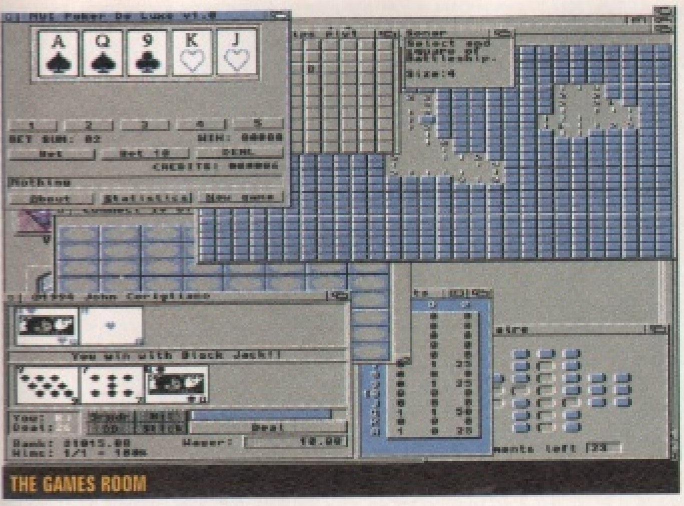
The Games Room

■ **Available from:** Epic Marketing, Epic House, 43 Akers Way, Swindon, Wilts, SN2 2NF. Tel: +44 (0)1793 514188
■ **Price:** £12.99 plus £1 p&p

AMIGA SUPERSTAR

Imagine my disgust when Epic sent me this monstrosity. Not only are there half a dozen different solitaire games, but there are about 40 assorted solitaire variants, Bridge games, Whists, Cribbages and so on.

There is even the obligatory Klondike with


THE GAMES ROOM

around 200 (count 'em!) cardsets, going from Achilleos to X-men and taking in everything on the way – particularly if everything isn't wearing very much.

Don't like card games? OK, if that is your attitude, try the pub games drawer, with a few of those darts games, Kingpin, and a demo table from the excellent Slam Tilt Pinball game. Alternatively, the boardgames drawer has a good 30 odd games, various shades of chess, chequers, backgammon and so on. Tetris addicts steer well clear, there are over 60 variants here, enough to keep you unable to move from your computer for a few years, and even Mah Jong comes in 7 different flavours. The casino games and fruit machines are there for anyone odd enough to like playing fruit machines with no prizes, there are 15 Workbench games, about 30 puzzle games and a few odds and sods elsewhere.

This is a real grab bag of titles. There are a whole load of absolute Amos nightmares, but there are also some true classics. It can be real fun sorting through the disc to find the bad titles too, something like the execrable World Championship darts, although be prepared to reset your computer a lot, there are all too many games here which tediously refuse to quit.

The idea of The Games Room is not a new one, but it is certainly a very complete one of it's kind. It is a dual format CD with around 500 games evenly split between Amiga and Windows, many of which are bad, but some of which are rather excellent. If your idea of gaming begins and ends with fast action hi-res extravanganzas, then you're paying rather a lot for a coverdisc demo of an old pinball game, the only thing on the disc which comes close.

If you are after enough rainy day material to keep Noah happy, then there is no doubt that this provides. Don't expect to see a whole lot of brand new material here, it's mostly just the usual subject, but if you don't have a collection yet, this is going to be the best you are likely to find. **90%**


THE GAMES ROOM

CD of the Month

Fontmania

■ **Available from:** Weird Science, Q house, Troon way business park, Humberstone lane, Leicester LE4 9HA.
■ **Price:** £9.99 plus £1 p&p.

Take a close look at a CUCD icon and you will see that the writing on it is a tasetful font, selected on a monthly basis from our limitless collection of colour fonts.

We wish. Actually finding a new colour font for the CD every month is a bit of an epic task. Anyone who does a lot of layout work, artwork, video titling or anything remotely similar, is going to some day run into a lack of font. Fonts are a bit like money, however much you have, it still isn't enough.

Oh sure, it's a bad idea to use more than 2, maybe 3 fonts in a layout, but one day inevitably you want to do something new, find some really lanky font, use a typeface with bullet holes in it or whatever. However big your fonts dir, that perfect font just inevitably won't be there. This is why the CD-ROM was invented.

There have been countless CD-ROMs full of fonts in the past, but there hasn't been one in a little while so Weird Science figured it was about time someone produced a single all encompassing font CD-ROM and have done with it.

Stick the CD in your drive, open the disc icon on Workbench and you get an empty window. There are a couple of text files there, but not even a file reader to view it on. One is a readme with a quick list of the drawers and how many fonts they have in them, the other is a full list of all the fonts, a monstrous 2Mb text file which should generally be avoided.

There are a total of 10,794 fonts on the disc, which translates to something more like 3 or 4 thousand if you ignore the fonts which are repetitions in a different font format or ones you'll have difficulty persuading an Amiga to read.

So are the fonts any good, you ask? Hard to criticise the quality when you have them in this sort of number. The range of monochrome fonts is excellent and can't be faulted. If you want a font, it will probably be here.

The colour fonts did not fare quite so well, with a lot of them refusing to load into PPaint at all and finding fonts with such luxuries as lower case, numbers, or dare I be so demanding, punctuation, was hard. The IFF fonts aren't so easy to use but are often a better choice, and include the blue rose and gelignite collections.

The real lack on this disc is the indexing. Look in the near identical bitmap and intellifont directories and you will see nice IFF index files, but other than that there is a lot of sorting through to do. It would be nice if there was a single index of all the fonts on the CD, something which would be a little time consuming to do but would polish off the package perfectly.

You will probably end up copying the fonts that you really like onto your hard drive and then keep the disc aside for *special occasions* – but come those *special occasions* you will be cursing at the lack of an index.

The ideal would be a printed catalogue, but this is a very cheap CD. A catalogue on disc in a few ready to print formats would make this the unquestioned king of font collections, but at under a tenner you can't really go far wrong.

A best buy for font users. **90%**



Art Gallery

Are you a Digital Dali? Computer Carravagio? Send your pics to: Art Gallery, CU Amiga, 37-39 Mill Harbour, Isle of Dogs, London E14 9TZ.

Temple by Paul Hanson



Paul Hanson created this image by superimposing a scanned photograph on a Lightwave render. He used ImageFX to do the superimposition and used the radial star effect to produce the glow on the leg. The edges of the figure suffers from Jpeg artifacts, but it isn't clear whether this is a problem with the original scan or something introduced when Paul jpegged the pic to send in.

Put 'em up by Steven Greenfield



A great bit of photo manipulation with a good sense of humour. The fairy figure would blend in better if the lightsourcing matched that of the main image. This is the trick of really believeable superimposing.

Modern Times by Jordan Cadby



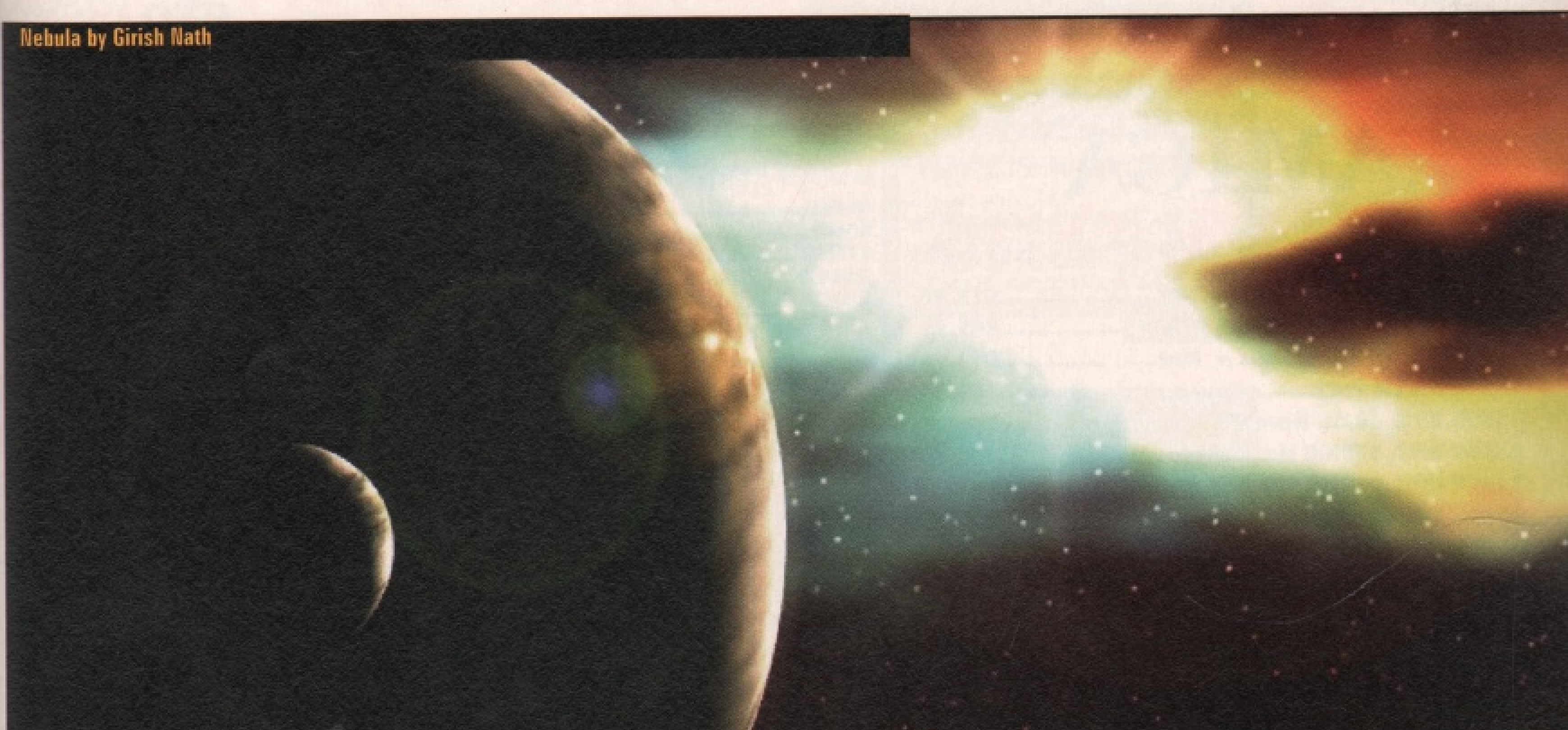
Jordan is a bit of a Cinema 4D fan, and a bit of a Babylon 5 fan too, judging by the other images he sent. This one gets in for being a bit unusual!

Stormbot by Peter Devos



Peter sent in this alternative view of the scene printed last month. The compositioning and lighting is a real improvement.

Nebula by Girish Nath



This simple image from Art Gallery favourite Girish Nath was done in Lightwave with the colour map for the nebula done in Photogenics. Look at the small moon catching the edges of the sunlight as it comes out of eclipse – this highlight balances out the image perfectly and works with the lensflare to make a strong diagonal composition.

Amiga Workshop



As ever Workshop continues to educate, enlighten and bring goodwill to all men... In actual fact the only thing Workshop can't help you do is stuff the turkey!!

84 Imagine 4.0

In the final lesson of Imagine, John Kennedy shows how to produce animations that rival all the biggest Sci-Fi Blockbusters.

88 C Programming

Jason Hulance waxes lyrical about the fine art of programming, and in particular the world of the Universal IFF Library.

92 Surf's Up

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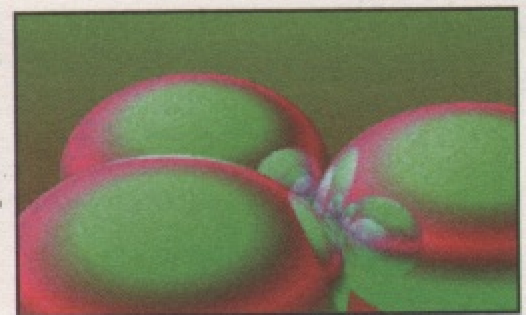
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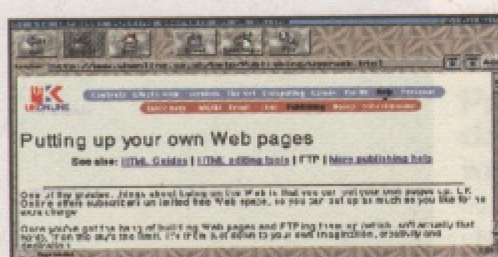
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With soap boxes underfoot, CU Amigas staff and contributors let the world know just what they think about stuff. Don't mess.

PART 13 Imagine 4.0

We've looked at many aspects of using Imagine over the past few years (yes, years!) but we've yet to look at the ultimate goal: creating a lengthy animation.

There are plenty of tricks to pass on when it comes to rendering your own version of the Star Wars Trilogy or Jurassic Park 3, and I hope that by the end of this you'll be tempted to have a play.

Before we get started, it's important that you have the right hardware. There is little point trying to create a long animation if you can't store it, in other words, a hard drive is essential. I'd go further than that though: a fast hard drive is essential. Larger animations will have to be spooled from disk, that is read and displayed in a continuous process, and so a fast disk is essential. This means that a large capacity 3.5" disk will be required. EIDE drives are fast, but a SCSI2 system will be faster too, which you use depends on your Amiga.

It almost goes without saying that a fast Amiga is a good idea, and a 68030 or better processor is a must. Memory is important too, not only for rendering complicated scenes, but for improving the results for playback. Memory is quite cheap at the moment, and a 16Mb Amiga is a good start. Plan it in advance.

More trite advice, but it is important. If you are planning an animation which has many different scenes, camera viewpoints and objects, put your thoughts down on paper. Your objective is usually to portray a story, so you need a beginning, middle and ending.

Your opening scene might be dramatic, or low key, that's up to you of course, but you might consider a subtitle to set the scene. Adding some frames which consist of a few lines of text, X-Files style, can be easily done with a paint package.

The best way to plan things is to sketch your ideas down on paper. Don't worry if you can't draw, because no-one else need see these scribblings. This is your storyboard, and you should include details such as camera angles, the objects included in the shots and the length of time you want to the shot to last. You are effectively acting as the Director of your own film, and no Director is going to start shooting until he or she knows exactly what they want to achieve.

At this stage you might want to think about whether you are going to include any live action scenes in your animation. With a genlock, you can add rendered graphics to a 3D scene. In fact, a superb trick is to render your spaceship, using the genlock transparency colour for the main window. Set up your camera, and then load and display the rendering scene, with careful tweaking you can dress up and appear to be inside the cabin of your spaceship, as the live view from the camera will only pass through the window.

This is an adaptation of an age-old technique: before computers came along, special effects people would paint elaborate images onto glass, and place this in front of the camera, filming actors behind. Watch 2001: A Space Odyssey for the seminal example.

Use other computers to speed up rendering

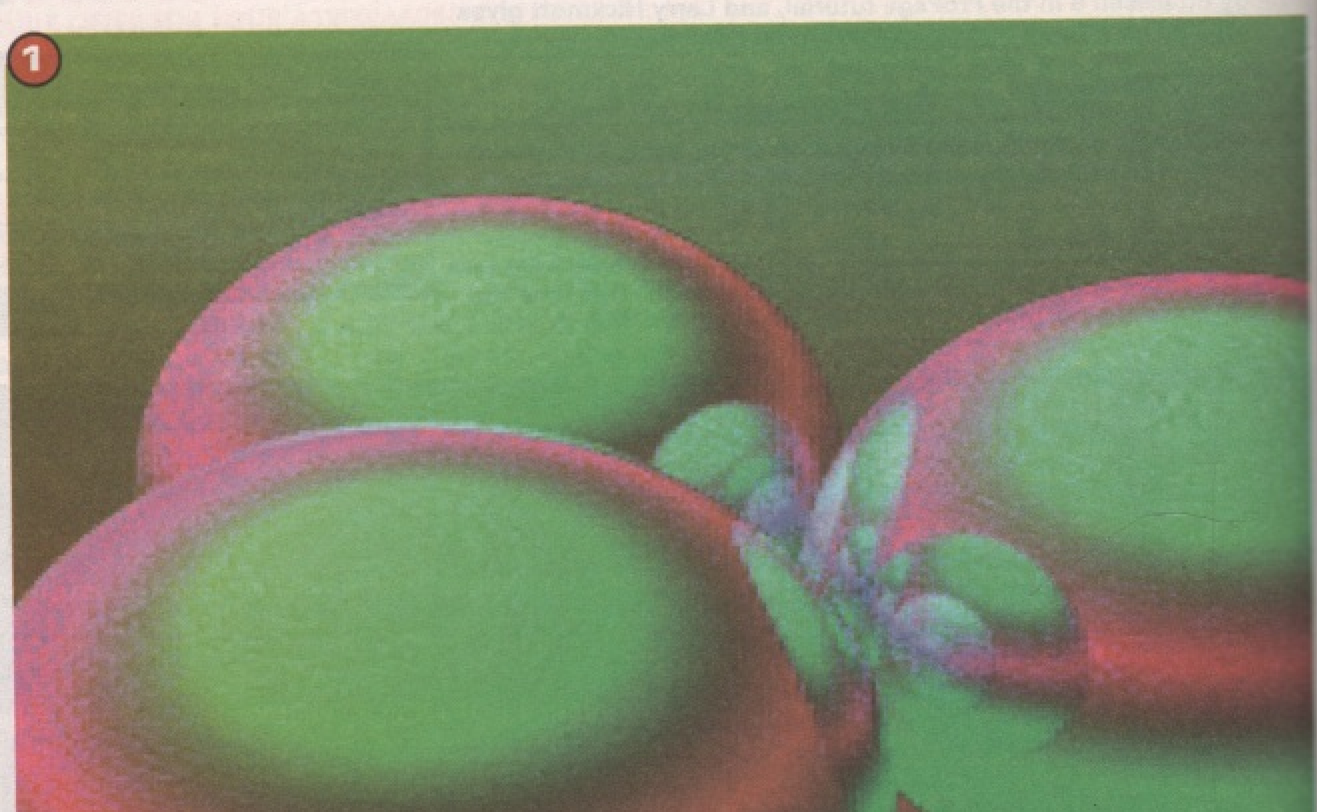
If your Amiga isn't the fastest rendering machine in the world, and you haven't got the spare cash to buy a 68060 board, try making use of your friends systems. Supply them with an Imagine project, and ask them to render it in their spare moments. Obviously you will have tested the images thoroughly, by both rendering a wireframe or other simpler version, and one or two full, high-quality images.

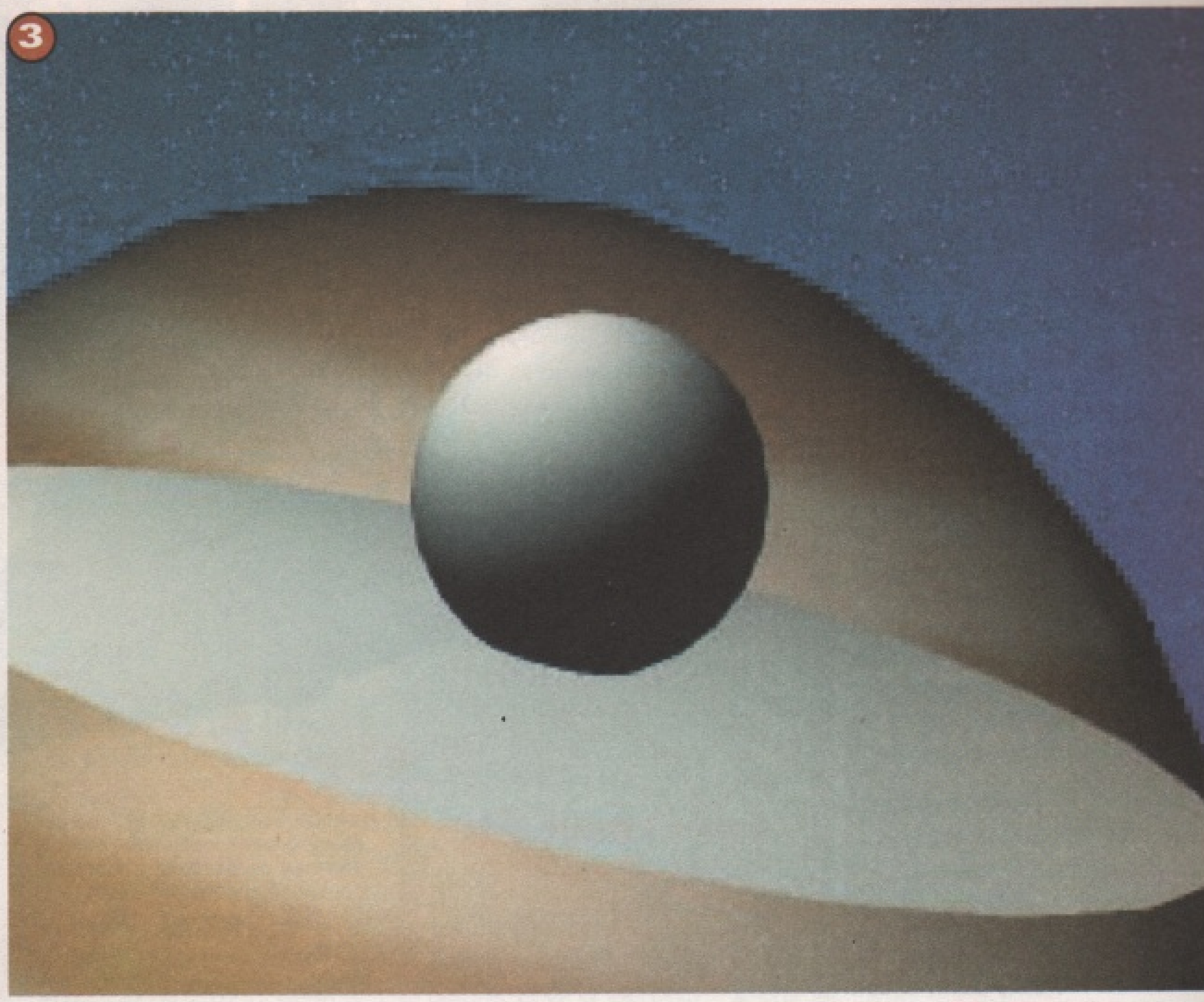
If one of your friends has a PC, ask them nicely too, Imagine is available for this platform, and even an entry level PC can render 10 to 20 times faster than a 68040 based Amiga. (see pics 1&2)

Designing models: different models for different scenes

You've spent hours, days even, designing your superb alien attack craft. It really looks the business, with carefully drawn brushmaps and minute detailing on external exhaust ports. When you place it in your scene for rendering, it appears in a block of the screen sixteen pixels square. Ever wondered if your time was well spent?

This is why planning is so important. If you are going to use a model only in the distance as a tiny little

1




spec, then for goodness sake don't waste time adding detail which will never be seen. Your alien ship might have looked exactly the same if it was a collection of three rectangles given a shade of grey.

Not only have you wasted your time designing the object, but you are wasting rendering time too: Imagine takes up more memory and resources with detailed objects, and needs to load and store all the brushmaps for example.

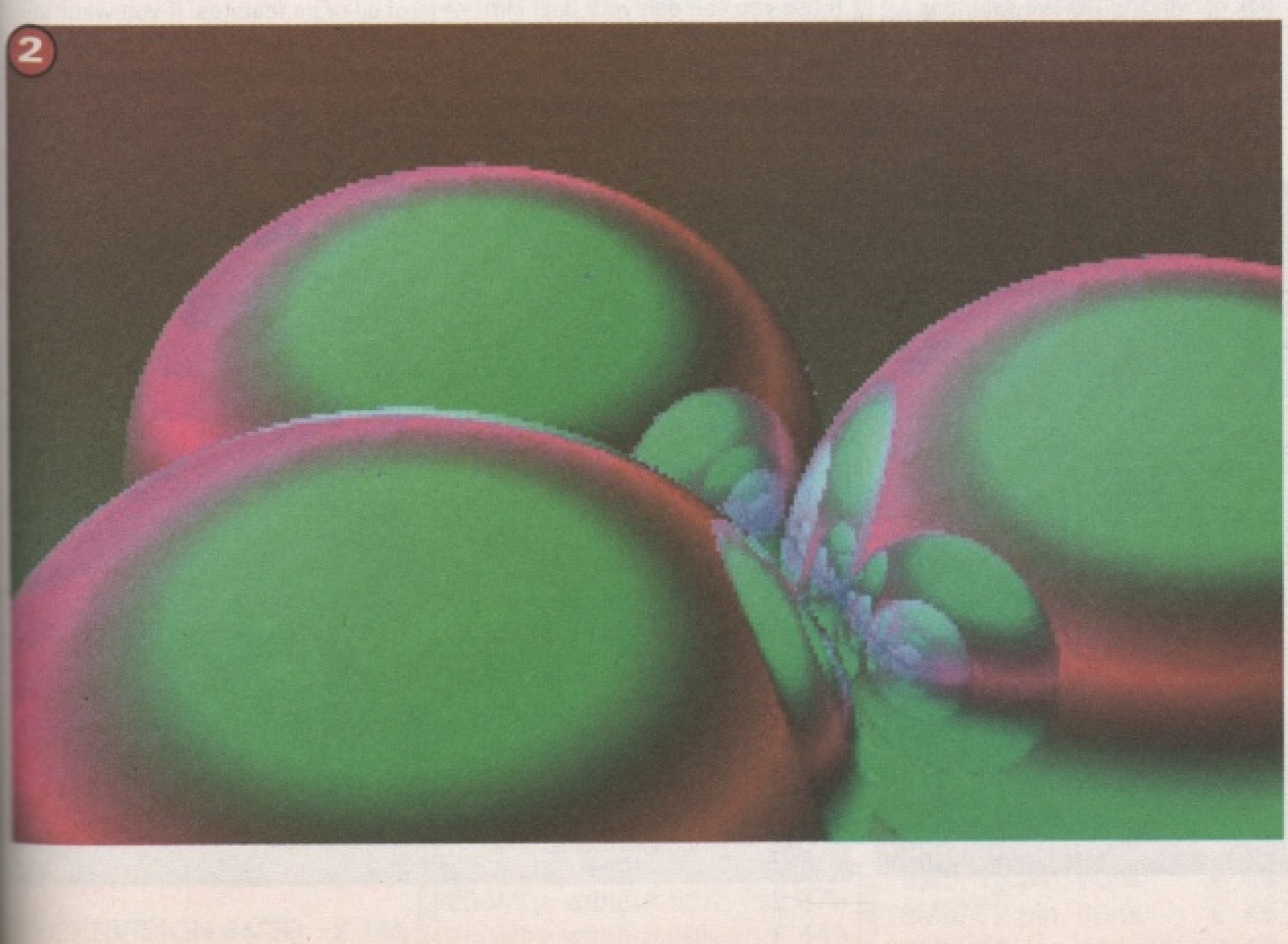
What happens if you want to create a model which appears both as a close up, and as a distant object? Use two models of course. Create a simple one for long shots, and a more detailed one for close-ups. If you are planning an extreme close-up when only a portion of the object is visible, then design a model with only the necessary parts. If your scene calls for a close-up view of a porthole, don't spend hours on the engines and cargo bays which aren't visible. (see pics 3&4)

This is an extremely simple technique to use, as you can create different models and save them as different names: SHIPCLOSE, SHIPFAR for example. However, this can also be very useful to speed up your test rendering.

There are times, when you must render your animation to see if you have the movement right. However, you don't need to render a 100% accurate scene. Sometimes a wire-frame preview will do perfectly well, but other times only a solid object will do.

In these situations you can make use of the fact that Imagine makes it easy to change the object used in a scene, even after it has been loaded, positioned and stored in the Stage Editor. Here's how: imagine you have a scene involving a spaceship, which you want to fly past the camera. Create two objects, one with minimum detail, and the other your fully-fledged, no expense spared, model. Name them SHIPHIGH and SHIPLOW. It's important that both objects are exactly the same size, so construct one using the other.

Set up your scene as you would normally, using the SHIPHIGH object. Now, go to the Action Editor and locate the Actor which is your ship. If you click in the blue bar, you will be able to change the name of the object to SHIPLOW. Everything else will remain the same: the position, the paths, the special effects, but your test renders will happen a great deal more quickly. (see pic 5)



Pre-rendered backdrops

We've already discussed in detail how to use pre-rendered backdrops to speed up rendering, so there is no point going over it again. Remember that a long animation is the perfect opportunity to use this technique, and don't be afraid to experiment with backdrops which are actually scanned or digitised from live sources instead.

Some of the NASA Hubble Space Telescope images are perfect for space background, and even better, totally royalty free. You'll find them on the Internet and on various CD-ROM collections.

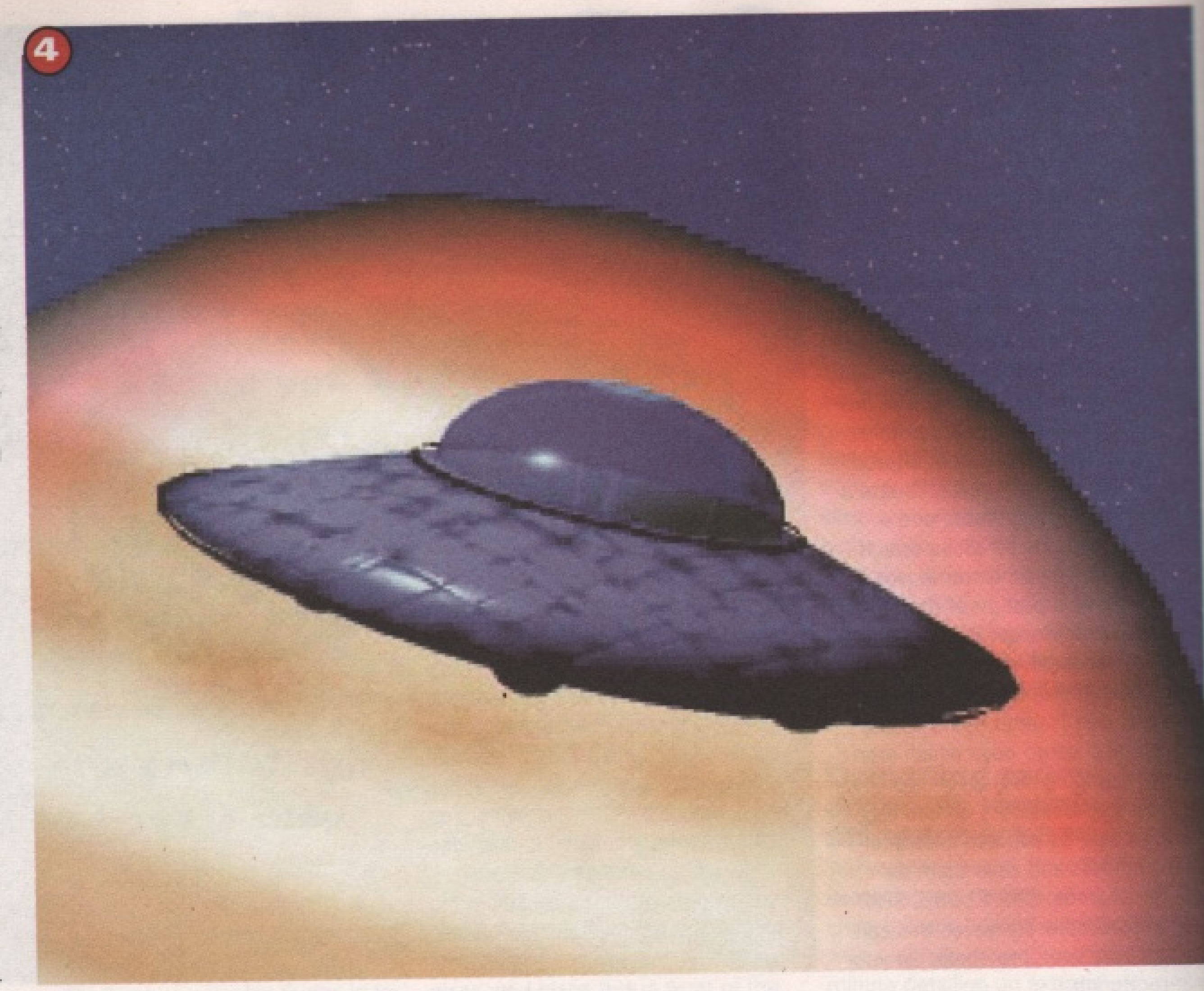
Calculating times carefully

Timing is essential in an animation, and you have to have a feel for how

long your animation will last. Try to picture the movement in your head, and judge how long the scene will last. I always tend to underestimate the length of time a scene should last, so I automatically double the length.

Remember that you have to take into account the number of frames you will be replaying a second. In an ideal world you will displaying 25 frames per second. However, this figure depends on many factors: the screen mode, the speed of the Amiga, whether the image is playing back from memory or whether it is being spooled from hard disk. You will have to experiment to find the frame rate you are using.

If, for sake of argument, it's ten frames per second, then a quick burst of mental arithmetic leads us to the conclusion that a twenty second clip will require 200 frames of animation.



Playing & Recording your animation

The end result of all your work will be a huge collection of IFF files. Each frame will need to be collated into a single (or maybe several) ANIM files. There are plenty of software packages around to do this, my favourite is Main Actor Broadcast. (see pic 6)

Playing back your animation isn't always easy. A very long animation will invariably not fit into memory at once, and so you'll need to find some other way of playing it. The simplest option is to play what you can, and record each segment to videotape as you go.

Unfortunately most video recorders aren't great at stopping and starting whilst recording, even in Pause mode. They have a nasty habit of rewinding slightly, and if you aren't careful your two second clip will be eaten by the editing process.

If you have a fast Amiga you should be able to spool the animation from hard drive fast enough to look convincing. As I've said, this will depend on the screen mode used, but a program such as Viewtek does an excellent job.

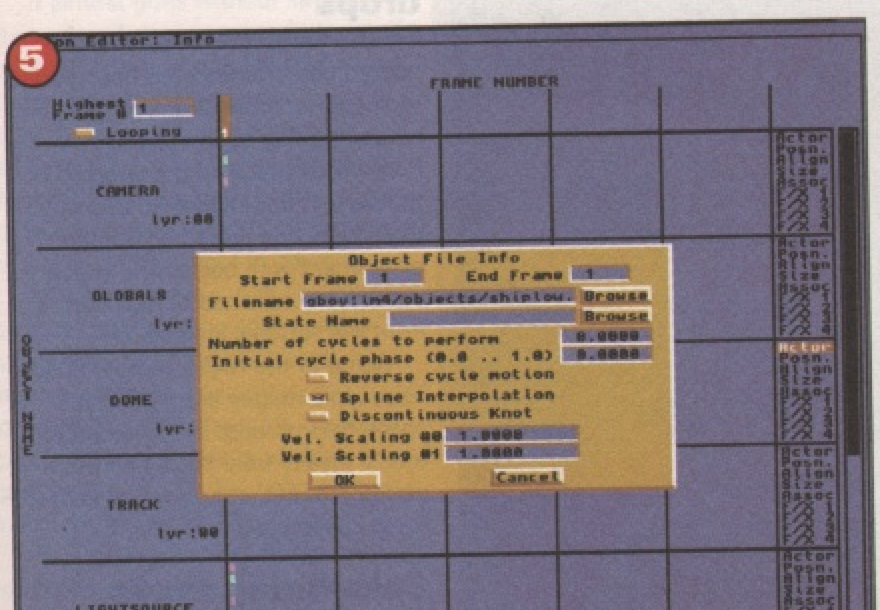
This is especially true if your animation is converted from ANIM5 to ANIM7 format first. If you are very lucky, you might have or know someone with a VLAB Motion or other real-time animation system.

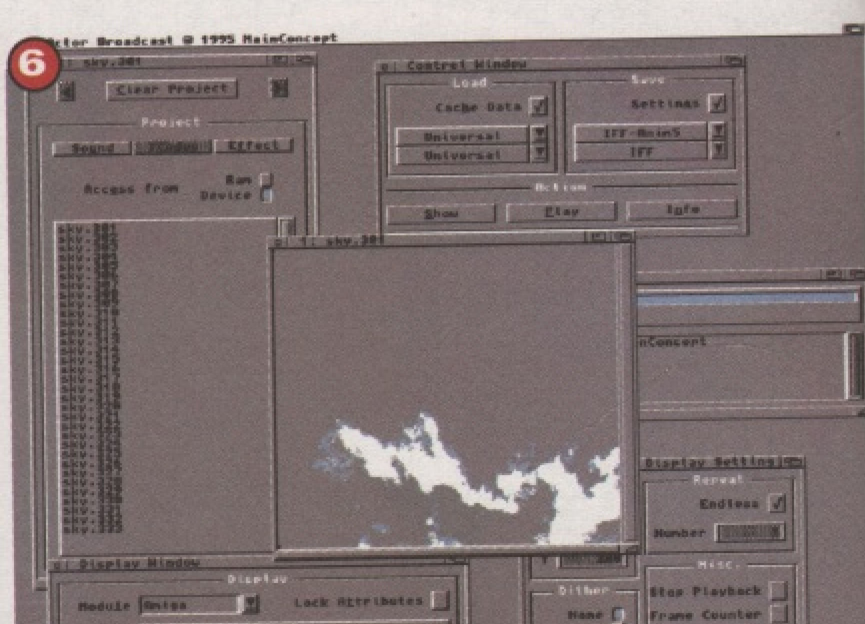
These packages use hardware video compression to capture and replay animations, and with one of these you can edit your final film and then play it all back in one go directly to video tape. There are similar systems on the Mac and PC if you should need to go that route.

That brings us to the end of our seemingly never-ending look at Imagine. I hope you've enjoyed it as much as I have, and that you'll forgive the mention of the dreaded PC.

Imagine is one of the all-time great pieces of Amiga software, and I doubt that I will ever make full use of all of its features. If you want to contact me with specific questions on Imagine, please visit my web site at: www.sticky.net.

John Kennedy





Amiga C Programming

This month we're going to be visiting a couple of good libraries... but not for books.

PART 6

One day, many years ago, some bright spark hit upon the idea of fashioning a round piece of stone (or wood) and rolling it along the ground. We look back now and feel very grateful that they shared this idea with other people, or else our cars would look very silly.

That was a strange way to start this tutorial, I'll grant you, but the point is this: re-inventing the wheel is an activity that programmers are very prone to. When you're just starting out and learning how things fit together, it's a good idea to start from scratch and make all the mistakes others have made many times before, but once you're up and running it's much more efficient to re-use other people's hard work.

Can I have a file?

Take a boring old file requester, for example. To make one of those out of the basic components of gadgets and directory lists would take quite a long time. And on the way you'd probably make a number of mistakes, and this would generally detract from the main purpose of your real program.

Luckily, your Amiga comes supplied with a number of handy routines that take a lot of the drudgery out of programming common idioms. We've seen this already in the simplified menu creation offered by the GadTools library, but this month we're going to take a look at another standard library: ASL (which probably stands for 'Application Standard Look' or something equally silly, since Commodore seem to have avoided a definition in their documentation!). This library makes it very simple to create standard file, font and (in later versions) screen mode requesters.

The use we'll put it to is to create a load and (eventually) a save file requester. But what good are such things to our program? What do we have that could be loaded or saved? The answer is, of course, the nice picture you can paint. So, for the second part of this tutorial, we'll take a look at Christian Weber's 'Universal IFF Library', which is very old, but almost a standard library (an archive is supplied on the disks).

Back to ASL, the first example on the disks is "asl0.c" which builds on last month's final example. The differences are the addition of code to open the ASL library and an extra "Load" menu item, with corresponding code (the "load()" function) to react to this new item (see Example 1). Don't expect too much, yet, as this first example doesn't do anything with the requested file.

If you study the example and the documentation for the ASL library,

Example 1

```
/* Open an ASL load file requester */
void load()
{
  struct FileRequester* freq;
  if(freq = (struct
FileRequester*)AllocAslRequest(ASL_FileRequest,NULL))
  {
    if(AslRequestTags(freq,
                      ASLFR_TitleText,       "Load
File",
                      ASLFR_Window,          drawwin,
                      ASLFR_Flags1,
FRF_DOPATTERNS,
                      ASLFR_InitialPattern, "#?.iff",
                      TAG_DONE))
    {
      /* Directory is in freq->rf_Dir, file in freq-
>rf_File */
    }
    /* ..else request was cancelled */
    FreeAslRequest(freq);
  }
}
```

Example 2

```
int createBitmap()
{
  /* The MEMF_CLEAR flag is vital, since it zeroes the
allocated memory. */
  /* Thus the pointers in the bitmap will be NULL, if
we don't manage to */
  /* allocate them properly. */
  if(bitmap = AllocMem(sizeof(struct BitMap), MEMF_PUB-
LIC | MEMF_CLEAR))
  {
    int plane;
    InitBitMap(bitmap, scr->BitMap.Depth, scr->Width,
scr->Height);
    for(plane = 0; plane < scr->BitMap.Depth; plane++)
    {
      bitmap->Planes[plane] = AllocRaster(scr->Width,
scr->Height);
      if(bitmap->Planes[plane] == NULL)
        return FALSE;
    }
    /* If we get here, we succeeded. */
    return TRUE;
  }
  else
    return FALSE;
}

void freeBitmap()
{
  if(bitmap)
  {
    int plane;
    for(plane = 0; plane < scr->BitMap.Depth; plane++)
    {
      if(bitmap->Planes[plane])
        FreeRaster(bitmap->Planes[plane], scr->Width,
scr->Height);
    }
    FreeMem(bitmap, sizeof(struct BitMap));
    bitmap = NULL;
  }
}
```

Example 3

```
char filename[MAXFILENAME];
/* Create complete filename from ASL's dir and file */
strcpy(filename, loadreq->rf_Dir);
if(AddPart(filename, loadreq->rf_File, MAXFILENAME))
{
  IFFL_HANDLE handle;
  /* Try to open the IFF file */
  if(handle = IFFL_OpenIFF(filename, IFFL_MODE_READ))
  {
    LONG  count;
    UWORD colortable[256];
    /* Get colour information and change screen
colours */
    count = IFFL_GetColorTab(handle, colortable);
    LoadRGB4(&(scr->ViewPort), colortable, count);
    /* If we can load the picture, update window's
display */
    if(IFFL_DecodePic(handle, bitmap))
      CopySBitMap(drawwin->WLayer);
    else
      printf("Error: could not decode IFF picture\n");
    IFFL_CloseIFF(handle);
  }
  else
    printf("Error: could not open IFF file\n");
}
else
  printf("Error: could not make filename\n");
```

Example 4

```
char filename[MAXFILENAME];
/* Create complete filename from ASL's dir and file */
strcpy(filename, savereq->rf_Dir);
if(AddPart(filename, savereq->rf_File, MAXFILENAME))
{
  /* Make sure our bitmap is the same as the display
*/
  SyncSBitMap(drawwin->WLayer);
  /* Try saving our bitmap, using the screen's colours
*/
  if(IFFL_SaveBitMap(filename, bitmap,
                     scr->ViewPort.ColorMap-
>ColorTable,
                     IFFL_COMPR_BYTERUN1) == 0)
    printf("Error: could not write IFF picture\n");
}
else
  printf("Error: could not make filename\n");
```

you'll notice that the "ASLFR_Flags1" tag seems a little out of place. This raises a rather thorny issue, because the reason that this tag is used instead of the dedicated tag "ASLFR_DoPatterns" is to retain backwards compatibility. In these tutorials it's been assumed that you're running at least AmigaOS 2.0 (ie; KickStart V37). However, in AmigaOS 2.1 (V38) the ASL library was radically overhauled with a host of new tags (and a new naming scheme). But, the V37 ASL library just ignores the tags it doesn't recognise (i.e. all these new ones), so to get the same behaviour in V37 we have had to use the method that works in V37...

Library

As we've seen before, a library is a collection of functions. More specifically, the Amiga makes use of 'shared' libraries, which are the files ending in ".library" that you find (usually) in your "LIBS:" directory. These collections of functions are 'shared' because each program that uses them does not use its own copy, but shares a single global copy (and this gives a great saving on memory). In fact, multiple programs can use the same library function at the same time.

A bird? A plane?

To load and save a pictures we need to make a rather significant change to our existing setup. The key issue is taking control of the data that is displayed. Normally, Intuition is responsible for managing the graphical part of the window (ie; the bitmap) and we can't get hold of this directly. So, what we need is a different kind of window, one which allows us to manipulate its bitmap: a SuperBitMap window. But, this change is not just supplying a new flag to "OpenWindowTags()". We must also create a bitmap of our own (see Example 2), and let the window use it.

Once we have our SuperBitMap window, we can think about loading and saving. The code snippet for loading a picture (after a successful ASL file request) is shown in Example 3. The functions starting with "IFFL_" come from the "iff.library", which needs to be in your "LIBS:" directory. To access the functions we also need the "iff.h" header file. (In fact, we're actually using a slightly modified version of "iff.h" that's a bit more compatible with StormC.)

The key parts of the code are the creation of a complete filename from the results of the ASL file request (using the DOS function "AddPart()"), the extraction of colour information from the file (using "IFFL_GetColorTab()"), the loading of the screen colours (using "LoadRGB4()"), and the updating of the display once the image is loaded. This last bit is the trickiest, requiring us to use "CopySBitMap()" on the window's layer. This is only needed when you make a direct change to a SuperBitMap window's bitmap (like we have here), and not when you use the normal (RastPort) drawing functions.

The save mechanism requests a file in the same way as the load did, except we've used "ASLFR_Flags1" to indicate that we'd like a save mode requester and we've suggested a suitable initial filename. The real meat, though, is the saving code (see Example 4). This must first make sure that our bitmap is synchronised with the display. The function "SyncSBitMap()" basically gets Intuition to write any buffered changes to the SuperBitMap window's bitmap. Then "IFFL_SaveBitMap()" can be used to write this bitmap to disk (as an IFF

IFF

The Interchange File Format, designed by Electronic Arts way back in 1985. It's basically a format for structuring data such as pictures, text, sound files, or just about anything. The word 'IFF' does not really describe the kind of data, but it is often taken to mean ILBM data (ie, Interleaved BitMap, or a picture) in IFF format.



▲ **Here's one I made earlier...**

ILBM), with our current screen colours as the picture's colour information.

Tidying up

The way the toggling of the tool window is handled via a state variable ("opentw") is a good general concept, but it's actually a slight bit of overkill in this example. A better way to do things is to use a different approach to message handling.

Rather than get a message, act on it and then reply to it, we can (in this example, at least) copy the relevant pieces of a message and then reply to it straight away. The next example ("asl1a.c") uses this new technique, where we are now free to close the tool window in the message handling code.

The one subtlety to spot is the extra condition on the "while" loop for handling the tool window's messages. This checks that the tool window is still open, and so stops the loop after any message that causes the tool window to close.

We are going to make use of this new flexible style of message handling in a more spectacular way later, but for now we'll tackle one big and one small stylistic problem. The latter is the fact that the requesters 'forget' the directory chosen by the user the previous time they were opened (ie; the load requester always starts in the current directory).

This can be cured by moving the tags which initialise aspects of the requester into the creation call (ie; out of "AslRequestTags()" and into "AllocAslRequest()"). This change has been made in the next example, which now has a whole directory to itself (see "loadsave.c" in the subdirectory "asl2").

So, what are all those files in "asl2"? Well, as we saw in a slightly contrived way before, it's a good idea to break up your program into modules. That's exactly what's happened here: the "asl1a.c" is broken up into a number of modules.

The key concept is to restrict access to all those global variables, and make only certain bits of code able to change their value. For example, the "loadreq" and "savereq" variables have now been localised to the module "loadsave.c" (the "static" keyword means that they are visible only to code in that file, but otherwise they're just like global variables).

Read access to the variables is granted by "getXXX()" functions, so the code that needs to use, say, the window pointers still can.

SuperBitMap window

A window where you supply a bitmap for the window to use. The benefit of this is you can then access the complete contents of the window as a bitmap. Care is needed to keep Intuition informed of changes you make directly to the bitmap (by using "CopySBitMap()"), and to get Intuition to update the bitmap when you want to read it (by using "SyncSBitMap()"). For technical reasons, these functions work on the layer associated with a window, rather than on the window.

Another point of interest is the structure of the header files (the ".h" file corresponding to each code, or ".c", file). In a time-honoured way, the prototypes are wrapped in an "#ifndef" that prevents the compiler 'seeing' the contents twice, even if this file is included multiple times (directly or indirectly) when compiling a module.

Take your time to study the other effects that this modularisation has had. You might also notice the "Smakefile", which is used by SAS/C to compile multiple-file projects like this. (If you've got both SAS/C and StormC, take care to delete the ".o" files when you swap compiler!)

Exercise

To keep you busy until next month, there's one more example (the subdirectory "asl3"). The new functionality is the dynamic changing of the whole GUI (screen and all) and the most significant changes are in "loadsave.c". The display should now change to the most appropriate settings for the picture to be loaded, in terms of resolution, depth and size.

We've almost got a paint package on our hands, so we've come a long way in only a few months. Next month we'll look at adding a bit of ARexx into the equation. See you then. ■

Jason Hulance

Wheel

Piece of material (usually stone or wood) in the shape of a circle. Useful for making things move along the ground easily. Worldwide patent has expired so the design is freely available.

Next Month CU AMIGA MAGAZINE

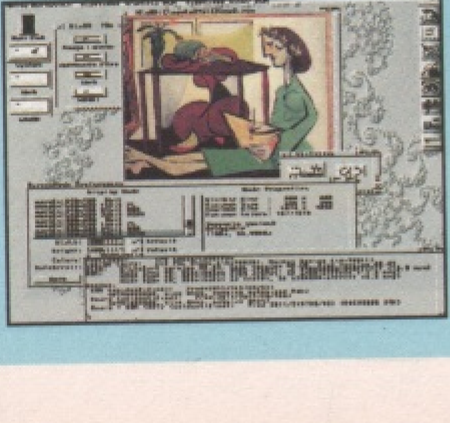
Myst: review and CD demo!

Just slipping through the net for this issue's deadline, word came from ClickBOOM that Myst has now finally been finished! We'll have the definitive review of the game we exclusively previewed in the December issue, along with a real treat for CD-ROM owners: an exclusive playable demo on the cover CD so you can see for yourselves whether it really is the ultimate adventure. We can't wait!



Amiga Forever

Sacrilege or the potential saviour of the Amiga? Amiga Forever is Cloanto's plan to bring the wonders of the Amiga to a wider audience than ever before: by releasing the official Amiga emulator for the PC. We'll be taking a good look at it next month and asking the people who matter some pertinent questions. Evidence of Gateway selling the Amiga up the river, or a shift away from hardware dependency?



New Amiga clones explored

We'll be testing out Micronik's new Amiga clones, specifically their exciting new A1500 (not a clone of the Commodore A1500) by the way) and also highlighting the developments elsewhere as a range of third party clones hit the market.

Back Issues

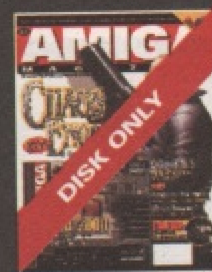
Looking for a specific Amiga article, game review, program, feature, tutorial, or even news story? Your search could well be over...



SEPTEMBER 1996
Disks: Vista Lite (full program) & a demo of Brian Lara Cricket '96
Features: The Aminet exposed. All 6 gigabytes!
Inside: Final Writer 5, OctaMED SoundStudio, Atapi CD-Rom drive. Plus an exclusive preview of the new AGA Worms.



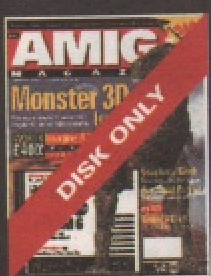
OCTOBER 1996
Disks: Upper Disk Tools: ideal for sorting out those awkward disks and drives!
Features: The Amiga in America, Net software...
Inside: The speed issue, or something. Three top accelerators, a TCP/IP stack comparison & Capital Punishment



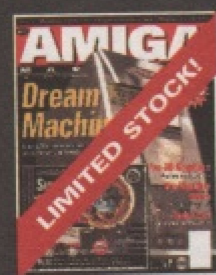
NOVEMBER 1996
Disks: XCAD 2000 - The premier 3D CAD package, plus Chaos Engine 2. CD-ROM or floppy edition
Features: Palmtop Amiga-Psion link-up
Inside: Opus 5.5, Delfina DSP sound card, Web Browser War, Alfa Quatro, CD-ROM writer



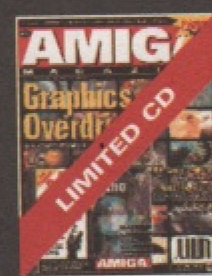
DECEMBER 1996
Disks: Wordworth 3.1 SE, Worms demo. CD-ROM or floppy edition
Features: CD-ROM drive for £50! Amiga and PC games on CD-ROM
Inside: Draw Studio, Apollo 1230, Storm C, Siamese RTG system, Tiny Troops



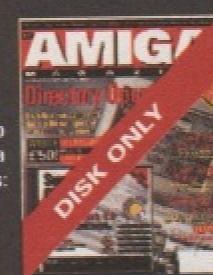
JANUARY 1997
Disks: CD-ROM or floppy edition, Imagine 4.0, Underwater Capers, plus over 100Mb of Imagine extras on CD
Features: Get a job in graphics, plus Imagine 4.0
Inside: Art Effect, PPaint 7, SWOS 96-97, Fighting Spirit, Chaos Engine 2 ...



FEBRUARY 1997
Disks: Design Works, Minskies Furballs plus Worms – the Director's Cut extras and Imagine extras on the CD.
Features: The new A/Box
Inside: Wordworth 6 Office, Turbo Calc, Minskies Furballs, Bograts reviewed.



MARCH 1997
Disks: OctaMED SoundStudio (full program) Chaos Engine 2, Chaos Engine 2 AGA demo
Features: Turn your Amiga into a pro studio. Printers: problems solved.
Inside: Quickcam, Cybervision 3D, SMD 100, JetPilot reviewed



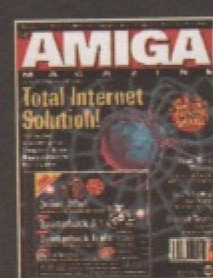
APRIL 1997
Disks: Directory Opus 5.11 (full program). Tiny Troops demo
Features: Build your own Tower Amiga Part 1. The 50 best Amiga Games
Inside: Massive Cinema 4D 3.0 Review, new DTP series, ProGrab Sampler, Teletext Decoder



MAY 1997
Disks: Image Studio (full program) Kargon RPG, exclusive clipart on CD
Features: The Future's Bright: Gateway buys Amiga! Tower Amiga Part 2.
Inside: PageStream 3.2, Big Red Adventure, LightWave 5, Epson Stylus 600...



JUNE 1997
Disks: Pro Page 4.1 (full program) MPEGA 2.4, Sysinspector, The Sun game & more!
Features: CD-R for Amiga – cut your own CDs for a few hundred pounds plus Tower Amiga Part 3: Zorro.
Inside: Turbo Print 5, Net Connect, Cybervision...



JULY 1997
Disks: Free Net sofware, Quarterback 6.1 inc QB tools, Big Red Adventure
Features: Total Internet Solution, the history of the Amiga & a look at Amiga artist, Eric Schwartz.
Inside: Final Writer '97, Siamese RTG 2.0, Burn It...



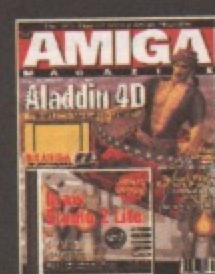
AUGUST 1997
Disks: Dogfight, Turbo Print 5 Lite, Storm C Compiler
Features: Power PC is coming, Crack the Code, plus Power Gaming
Inside: Cinema 4D, Voyager NG 2.90, IBrowse 1.12 & Tower add-ons...



SEPTEMBER 1997
Disks: Sixth Sense Investigations, Vista Pro, MakePath, GeoMorph
Features: New Faces of Amiga Gaming, Amiga: The Next Generation, DIY Sound Card
Inside: Art Affect 2, Art Studio 2.5, Micronik genlocks, Flying High



OCTOBER 1997
Disks: TFX, TB 303 Emulator, Virus Z, Video Easel, Visual Prefs
Features: TFX: Quickstart Guide/Techniques & Tips etc., Suzanne: The Portable Amiga
Inside: Fusion Mac Emulator, Civilization, Mk II EZ Tower, Storm C



NOVEMBER 1997
Disks: Draw Studio 2 Lite, AIR Link Software
Features: D.I.Y. AIR Link, Aladdin 4D V5.0, Hydra A1200 Ethernet, Sensible Golf
Inside: Epson Stylus Photo, OxyPatcher, More TFX Tips, Visual IFX, Envoy 2.0,



DECEMBER 1997
Disks: PC Task 3.1, Dir Work 2.1, Workbench enhancements; icons, backdrops etc.
Features: Myst, PowerUP: First look, ISDN: The Net on speed.
Inside: Imaginex, HiSoft Squirrel CD-R, Sharp MD-MS200 Minidisc

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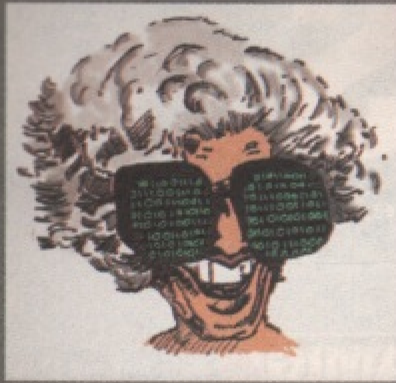
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Surf's Up!

Another goats horn overflowing with fruit and corn (that's a cornucopia by the way) of Internet sites.

Net God speaks

You know what annoys me? Sometimes it seems every web page I go to has 50 of those stupid 'get x now' icons, 'this site is best viewed with xxx' blurb or even 'this page must be viewed in 800 x 600 trucolour'. None of those people who make these pages understand the concept of the web. It's a standard, it is not a proprietary file format for one particular program.

Web pages are not supposed to offer the ability to present something pixel perfect, it's a mark up language, not an image format! I don't *want* to use your favourite browser, I have my own! I don't *want* to use that resolution, I have my own! It's just a goddamn web site so stop telling me what I should run and how to look at it or run the risk of me spending less time there!

Lose the stupid get x now icons. Just how many times do you think I've seen get the latest PC web browser icons? I don't need to be told what to use Amiga wise either. Hell, the RC5 home page even rants on about how wonderful AWeb is and how it's broken on other browsers.

Fix your HTML then! This is a disturbing trend creeping into Amiga web pages, the quicker we nip it in the bud, the better.

Miami 3 public beta

The Amiga's premier TCP/IP software package prepares for version 3 with a public beta containing most of the features. The betam dubbed version 2.9x, is available from the author's home page at **http://www.nordicglobal.com**. One new feature for Miami 3 includes





the removal of the user interface to seperate plug in modules.

The public beta still only comes with an MUI module but this can be completely ejected when the interface is not in use, thereby saving a small amount of memory if no other MUI applications are running. A GTLayout/Gadtools version will be available in the final 3.0 release. The beta retains the 1 hour limit in unregistered form so it too can be trialed for free.

Miami 3 has also grown the ability to communicate through a SOCKS based firewall. The main use for this would be Miami connected to a PC based network to gain access to the Internet. The SOCKS support would allow most Amiga Internet applications to work transparently although our initial tests failed to get this working adequately on the beta version.

The other utilities bundled with Miami have also seen minor improvements, better modem control and individual database entries can be disabled. Miami 3.0 does require a new keyfile version which can be ordered over the Internet as an upgrade. Alternatively new users can purchase Miami 3 outright from Active Software for £23 on 01325-352260.

WebFX 1.7 released

WebFX 1.7 has been released. This is a shareware package which uses ImageFX 2.1+ to create animations, crossfades and shadow graphics for your own web graphics.

This can enhance the look of your web page a great deal, previously the Amiga was lacking in software to perform this task. WebFX uses ImageFX to process the images into single frames and it then uses WhirlGIF, the command line Unix port program to generate AnimGIFs which can be used on the web. You can find the 209K odd WebFX on the Aminet in the comm/www/WebFX.lha path or see **http://www.intercom.it/~fsoft/webfx.html** for the home page.

RC5-56 cracked

The Amiga team in the Bovine RC5 effort made it to 7th place by the time the winning key was found.

Given that the team started much later than many teams, this was a startling feat. The Amiga team made 3rd position several times in the daily block upload rates. Now that the 56-key has been cracked, there's risable support for continuing with the 64-bit key cracking effort.

Unfortunately there's 256 times as much key space to explorer so it's not anticipated that a key would be found for years to come. However, if you're willing to throw some spare CPU power at the problem and watch the Amiga teams position in the stats, check out the Amiga RC5 home page at **http://www.cistron.nl/~ttavoly/rc5**

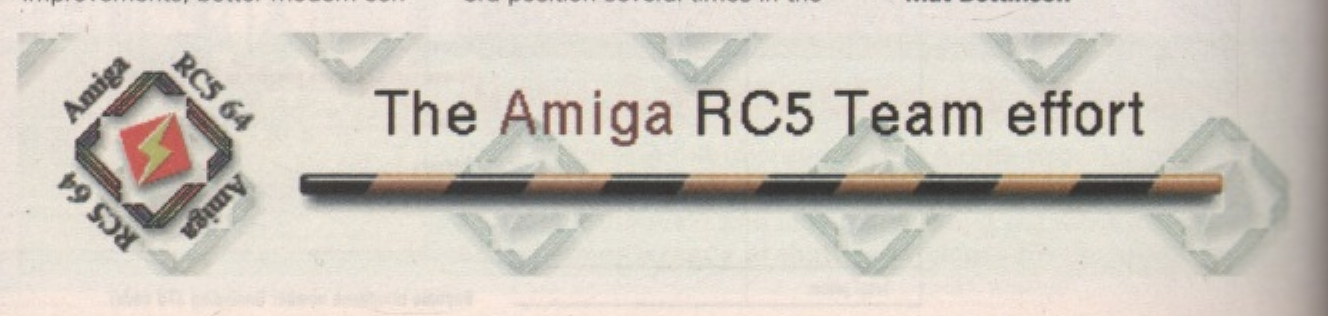
Schatztruhe PPC competition

The world's largest distributor of commercial Amiga software, Steffan Ossowski's Schatztruhe, announced a new monthly competition.

In order to have a chance of winning, one must find key letters written throughout Schatztruhe's web site written in orange. These will fit together somehow to spell out a common Amiga term. Also on the web site is a form for submitting the competition entries and each month someone will win a PowerPC accelerator from phase 5.

The PowerPC accelerator will be for the A1200, 2000 or 3/4000 depending on the winners preference. Schatztruhe's Website is at **http://www.schatztruhe.de**, happy hunting! ■

Mat Bettinson





Surf of the Month

Mat Bettinson and his pet hamster take to the Net to deliver another bunch of Amiga-biased Websites.

Amiga Org has been around for some time now. It has a similar mandate to CUCUG's Amiga Web Directory in that it's all things to all Amiga users. There's news, events, FAQs, links and shareware. Amiga.org is a little spartan compared to the AWD but it's on the up. Drop in and check out the events and news. There's often different stories and events, updated a little quicker than on AWD.

Over at the unofficial Alien Breed 2 home page, there's plenty of titbits for Team 17's ambitious doom clone. There's news about a forthcoming version of AB3D2 that will support graphics boards and non-AGA machines. Naturally enough this new version will be based on the source code released on CU Amiga's cover CD some months back. There's custom levels, screenshots and tips also to be found on this comprehensive page. Well worth a visit for AB3D2 fans.

Every time the Amiga is mentioned in the press, chances are the article will appear on the Honourable Mention web site. Scoping these out gives a good indication on the Amigas profile in the popular press, computing or otherwise. There's also quite a few buried facts and stories not usually found elsewhere.

Via an obscure link from this site, I found the secret plan Gateway have to incorporate the Amiga technology into a mass market application. The new affiliated company, Instantech, implements a solid waterproof build in two colour schemes for their new Amiga. It will be offered under the Standard Colour Price and High Fashion Colour Price schemes. That's right, the Amiga Whirlpool Bath costs only $956.89 in the basic colour scheme and includes curb-side delivery. You can scope it all out via their Bath Warehouse home page and choose your next model of Amiga and get clean at the same time.

Seriously, on the official bonafide Amiga front, Amiga Technologies home page has had something of a revamp. It now sports professional looking graphic design.

The spinning juggler globes are certainly on theme too. The news section announces noteworthy events and the new Beta section has the latest unsupported beta versions of some Workbench components such as Setpatch and the FastFileSystem. The latter designed to break the 4Gb barrier on hard drives. Well done Amiga Technologies for improving the site to one we can be proud of.

If you live near a US airforce base in Europe or otherwise have some interest in what the USAF gets up to in Europe, they have a comprehensive web site called the United States Air Forces in Europe. All the usual news and features on the subject can be found plus there's even details of USAF charter flight mechanisms should you decide to hire an A10 Tank Buster to sort out the morning traffic.

If you spend too much time on the web and have forgotten a loved one's special occasion, you can make amends with Interflora's superb site. Here you can browse the types of flower arrangements on offer. Choose your selection, purchase and have your flowers delivered anywhere in the world via the local delivery agencies. The prices aren't cheap but if you can't drag yourself away from the web browser, this might save valuable time pilfering the neighbours roses. ■

Mat Bettinson

URL's

http://www.amiga.org
The Amiga Org home page

edc.ml.org/ab3d2/
The Alien Breed 3D 2 home page

http://www.rust.net/~mignash/hm.html
Honourable Mention web page

http://www.instantech.com/bath/zzz6760/
The Amiga Whirlpool Bath Warehouse

http://www.amiga.de
Amiga Technologies official home page

http://www.usafe.af.mil/
United States Air Forces in Europe



▲ ... news of a forthcoming AB3D2 version which supports AGA machines...



▲ The all-new, all-singin', all-dancin' Amiga Technologies page.



▲ The Bath Warehouse home page helps you choose your next Amiga.

Wired World



This month we revisit the setting up of a web page. This time doing it the quick and easy way, as an alternative to our previously in-depth HTML tutorial. We continue to get requests to document setting up a web page, despite the lengthy HTML Wired World tutorials of the past.

Accordingly, here's the quick and easy way to get your say on the web with a different approach from that of the HTML tutorial. I still believe it's a bad idea for Amiga users to be completely isolated from HTML code but it's time we recruited a little help to take the drudgery out of it.

A brief tour around the Aminet comm/www drawer reveals a top little program called Webplug, you can find this at any Aminet mirror in path comm/www/webplug125.lha, of course it's also in the magazine drawer of the cover CD. Webplug, put basically, is a MUI based text editor that has a bunch of functions built in for adding the common HTML codes.

As you may know, HTML stands for Hyper Text Markup Language and its these codes that control how web pages look. This isn't as hard as programming, these are simply codes contained in <> symbols embedded in a text file.

Insert Webplug

After installing Web plug and running it, we're faced with a web browser looking program with a row of buttons. Let's leap in the deep and hit the menu option functions/header. Another window appears, all you need to do is type in a title for your first web page. Make sure the add <BODY> is ticked too. Now press Insert.

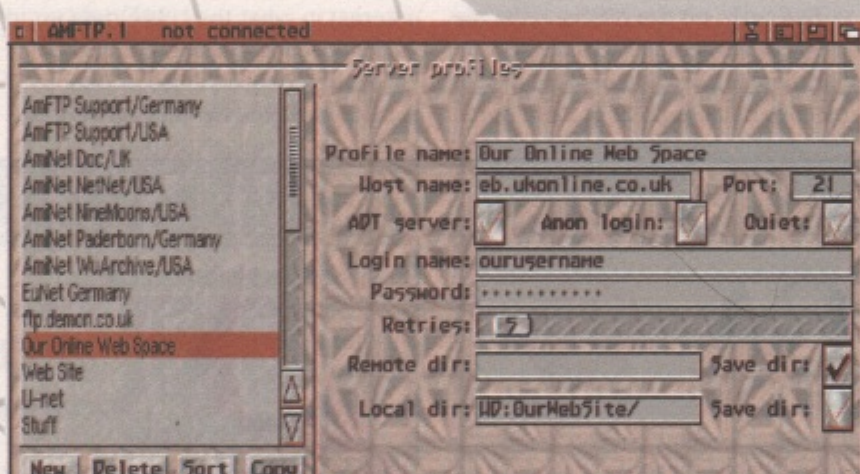
What you see is the most basic required code for a web site. Similar to programming, you may notice that there are some of the 'tags' with '<>' symbols around them which are 'nested'.

For example, <HTML> is at the start and end of the code. The </HTML> at the end tells us that it's time to stop the <HTML> document. Inside this, we have our whole page nested inside.

Inside the <HEAD> for header, we have the <TITLE> of the document. At the end of the title is </TITLE> and at the end of the <HEAD> is </HEAD> and so on, and so forth. It's a simple pattern and one that is important and must be obeyed.

A couple more words about HTML terminology; <TAG> is a called a tag, if there is anything else inside the tag, it's called an attribute. For example <TAG attribute=value>. The tag sets basic command where the attribute is an option for that tag which can be set with a value.

There can be multiple attributes and they depend on which tag is being used. Some attributes work on multiple tags.



▲ **Configuring AmFTP to log into the web server. From here we can upload our web pages.**

Just the basics 'mam

In the prior long running HTML tutorial, we covered most of the tags in detail and how to make them work. In this quick and easy guide to getting a web page up on the net, we'll only cover the basics.

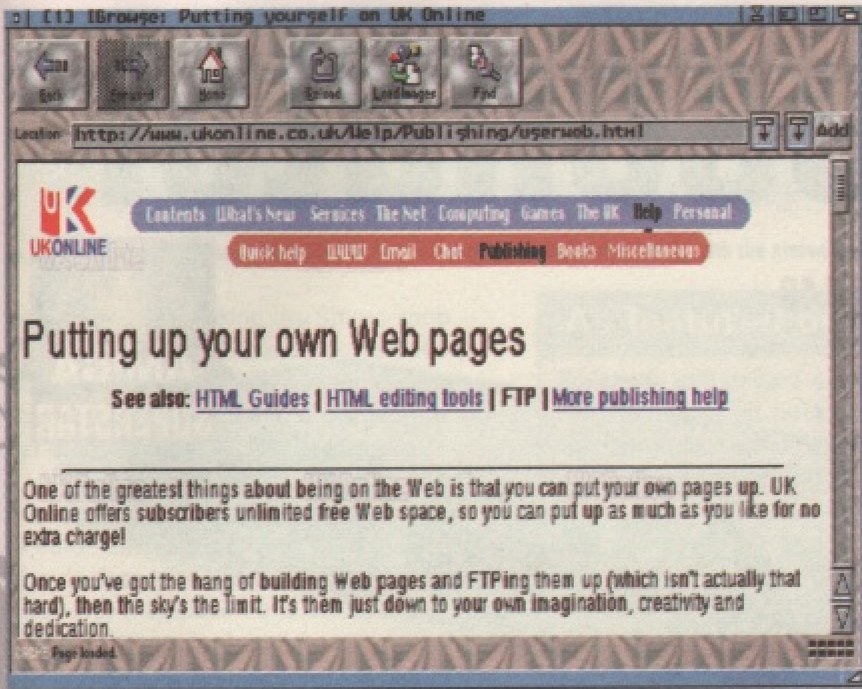
It's up to you to get back issues of CU Amiga with the Wired World HTML tutorials or buy a book on HTML, of which there are a great deal at just about any good book store. Back to our page so far. We have a basic web page, notice there is a blank line between the <BODY> and </BODY> we need to insert all the contents for our web page inbetween here. The </BODY> and </HTML> will always be at the very bottom of the page.

Insert some text here, it might be a good idea to keep some space between it and the body tags to make it clear where your contents are. We need to configure WebPlug to know about your browser. Select the menu Prefs/WebPlug, here press on the pop up gadget for BrowserLink and pick a .link file that matches the Browser you own/use.

These files can be found in the BrowserLink directory where you installed WebPlug. Next, select the full path to your browser executable and stick this in the Run browser box. Save your settings.

Since you've most likely moved your web browser to another screen, you can use MUI's settings to also move WebPlug to that screen. Try reading the MUI documentation if you don't know how to do it. Select Save As HTML on the Project menu and pick a place on your drive. Name your file testing.html.

To run your browser, you can select Run Browser from the Browser menu. Now select Send to Browser from the Browser menu again.



▲ UKOnlines pages about setting up your web pages would be a good place to start.

What to do with your pages

It's one thing having a web page and a couple of pictures on your hard drive but how do you get them onto the Internet. Well you'll need an account with an Internet Service Provider of course.

Last month we announced a free trial for CU Amiga readers with UK Online readers. For these people it would be a good idea to check out their documentation at http://www.ukonline.co.uk/Help/Publishing. If you have an account with another ISP, you'll need to ask them how to upload your web site. Generally if your pages work off disk and the HTML and images are in the same drawer, all you need to do is to rename the main page to index.html and upload all of the files to an FTP server. That means you'll need an FTP client such as AmFTP. UK Online customers will already have AmFTP as part of the Netconnect Lite package.

For UK Online, you would configure the FTP client to connect to the site web.ukonline.co.uk and set your username and password to the same as you use to log in to the Net. You should be free to select all your web files and press upload. Your web site would then appear at http://web.ukonline.co.uk/yourusername/ !

Our first web page!

You should see your very first web page appear in your web browser, hooray!

You'll notice that if you put any returns in your text, they won't have done a thing and the text will continue on a line until it hits the edge of the browser. The point of HTML is that it tells browsers how to make text look so if we want a return, we need to add some HTML to do it.

Now we're going to get to the cool stuff. Hilight some of your text and press Format button or select the Functions/Format menu option. Double click on the top line with <FONT></FONT> in it. A window will appear, click on Use size and move the slider to 6. Close the window. Now, drag the <FONT></FONT> line to the main WebPlug window.

Wow, now we have a <FONT> tag surrounding the text you highlighted, save and send to browser. Look, we've made the font huge!

It's time to change the look of the page dramatically. Delete the <BODY> tag and leaving the cursor there, press the background buton or select Functions/background from the menu.

In this window, uncheck the add </BODY> checkbox. Click on BGColor checkbox, press the popup and pick a colour. Do the same for the Text checkbox. Now press Insert. Save, send to browser. We've just changed the background colour and the text colour. The next two most important features of a web pages. Images and links.

To create an image, you'll need to have your image in the GIF format. You can use something like PPaint or Image Studio to convert format. Save the picture in the same place as your testing.html file is.

Put the cursor somewhere in the body and press the picture button. Select your image and type in a brief description of the picture in the Alt text box. Always check the Use size button when using this window. Now press Insert. Close window. Save. Send to Browser. Voila, a picture in our web page!

A tip here is that if you want text to flow to the left or right of the image, use the Align cycle gadget and pick left or right. If left, the image will be on the left and text will be free to flow to the right of the image. Your text will need to come after the picture or even your picture tag can be in the middle!

If you want to stop text from flowing around the picture after a time. Place the cursor where you want to stop and double click on
 - Force CR in the Format window. Cycle the gadget to Clear all and drag the
 tag over to the window.

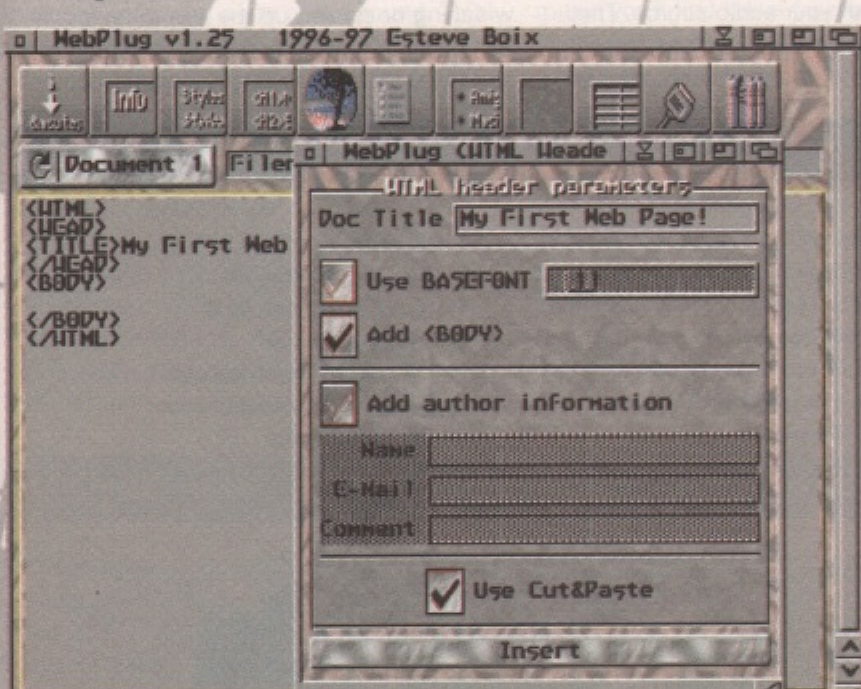
No home page is complete without a link to your favourite Amiga Magazine. WebPlug is a little flakey in this area so you're going to have to type it by hand;

<A HREF="http://www.cu-amiga.co.uk">CU Amiga Magazine</A>

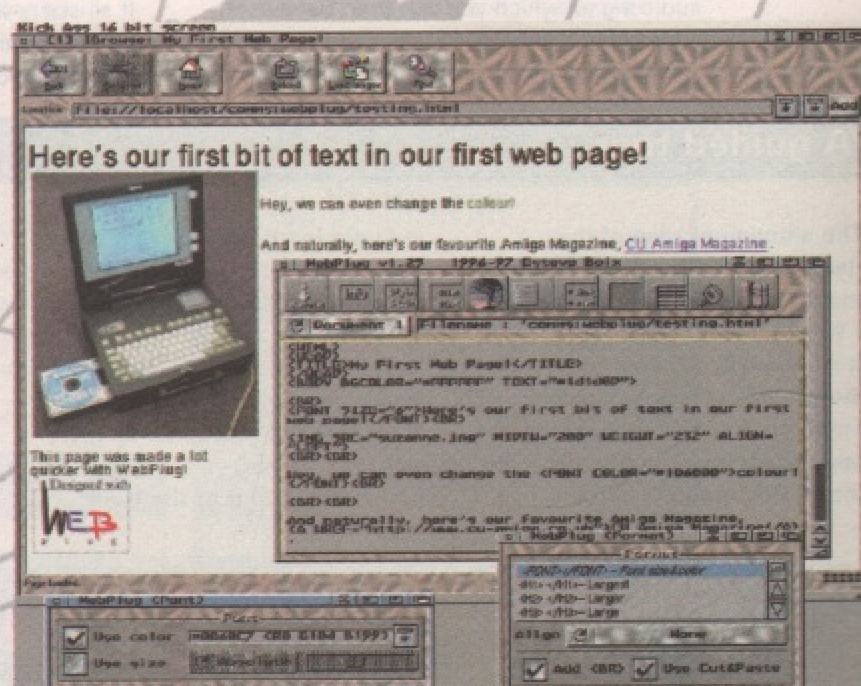
The text 'CU Amiga Magazine' will be underlined and pressing on this in your web page will take them to the page listed in the HREF attribute. In this case it's the URL of CU Online of course.

Experimentation from here on is the key, happy HTMLing!

Mat Bettinson



▲ WebPlug makes creating web pages a breeze.



▲ Opening WebPlug on our browser screen shows what the results will look like

THC-00 Resonator

■ Price: £169 ■ Supplier: Turnkey Audio © 0171 379 5148

Sound Lab takes a trip into the murky world of analogue filters with a look at the Resonator.



▶ **Bucking the trend of most rackmount units, the Resonator comes with bright green print on a space-age aluminium casing.**

How many things could you buy for £169 that are capable of totally revitalising your Amiga music set-up? A cheap reverb unit maybe? Fine, but hardly revolutionary... Perhaps a budget MIDI sound module with a selection of pianos and flutes for you to play with? Nah. What you really want is a big fat filter bank!

The THC-00 Resonator is just that, a bank of big fat filters. It's an analogue sound processor which uses the kind of filters and oscillators that those classic analogue synths like the TB303 and Moogs are based on. Actually, it uses the same circuits as the Korg PS series, such as the PS-3100. However, unlike a synth, on its own it won't make a sound. First you need to feed it an audio signal which you can then bend, twist, squeeze and squelch as you see fit.

Most bits of music production hardware have a very specific and definable use. A graphic equaliser takes out unwanted noise and boosts weak frequencies. A reverb unit makes instruments sound as if they're being played in real life settings. A compressor/limiter offers better control over recording levels. However, the Resonator does its thing purely for the hell of it. There's no sensible reasoning behind what it does, and frankly, there's nothing sensible about what it does at all. On those grounds it's scored a point in my book already.

How it works

For anyone who's not strictly au fait with analogue synth technology, fathoming the myteries of the front panel controls could be a bit of a challenge, although the 'manual' has a fairly good but very brief crack at explaining it all (it's just a piece of A4 card folded to make two pages). Now it's my turn to have a go then...

It all starts with your audio source. That could be anything you like, such as one of your Amiga audio outputs, a synth, an electric guitar, a drum machine, a CD player or whatever. The only limitation is that the input is mono, connecting through one of two 1/4 inch jack sockets (one on the front and one on the back – take your pick). With the Bypass switch in the On position or the Resonance knob turned right down, you'll then get the pure unadulterated sound source coming from the stereo audio outputs.

The first stage in processing your sound is to switch Bypass to Off and turn up the Resonance knob. In effect this controls the mix of the original and the processed sound that's passed to the stereo outputs. Now you can set the amount of action that will occur in each of the three Bandpass Filter frequencies. This three-filter arrangement is what gives the Resonator its stereo output capability. The first and third filters can be panned in various degrees to either side of the stereo image, while filter two is locked in the centre. When combined with the other controls you can get some wild stereo effects. The Stereo Pan knob (number two on the annotation below) has the effect of widening or closing up the stereo image. In fact you can get the ouputs from filters one and three to switch sides completely from

A guided tour

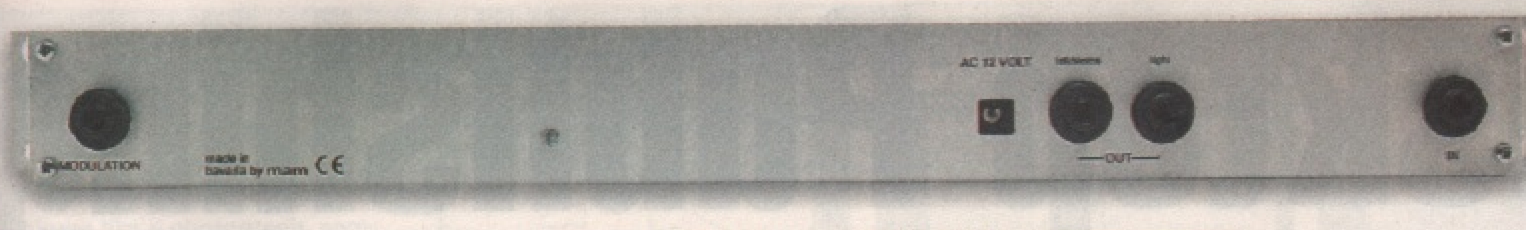
The aluminium case of the Resonator is a standard 1U rackmount affair, which means it's got a front panel measuring 48 x 5cm. It's unusually shallow for a rackmount box at just 8.5cm deep. There are five connections on the back panel (see the picture at the top of the opposite page):

- **Audio input (mono 1/4 inch jack socket)**
- **Audio output (dual mono 1/4 jack sockets)**
- **Power input (12v AC external power supply)**
- **Modulation input (mono 1/4 inch jack socket)**

And here's a tour of the front panel.

1. **Audio input**
2. **Stereo pan**
3. **Resonance level**
4. **Volume**
5. **Bypass switch**
6. **Bandpass 1**
7. **Bandpass 2**
8. **Bandpass 3**
9. **LFO indicator LED**
10. **LFO modulation rate**
11. **LFO modulation depth**
12. **Mode selector**
13. **Envelope modulation depth**
14. **Envelope modulation decay**
15. **Polarity switch**
16. **Manual modulation depth**
17. **Modulation input**





▲ **The back panel features alternative inputs for modulation and audio, along with the stereo output and a socket for the external power supply.**

left to right by cranking the Stereo knob from one extreme to the other. So not only does the Resonator totally mash up your sound, it gives space and movement to the flattest of mono sources.

Next up is the LFO (low frequency oscillator) modulation section. This creates a kind of automatic slide in the filter frequencies from high to low. You can set the amount of frequency modulation and also the rate at which it swings from high to low. There's a pulsing red LED that gives you a visual indication of the speed of the LFO. If you want the filters to open and close without you turning the knobs you can set this to any rate you like. You can turn either of these knobs fully down to bypass this section.

Here's the science bit

Things get a bit more confusing when you reach the three-way Mode switch. This selects different combinations of LFO types and Bandpass filters. It's complicated if you read what it's actually doing, but at the end of the day you can just flick the switch and hear how it affects the sound without having to understand what's really happening behind the scenes.

Moving along we come to the Envelope Modulation section. This allows you to link the opening or closing of the filters to the volume of the sound you're processing. For example, you can set things up so that the the filter is opened and closed by loud and quiet bits of your source sound. You can also select whether the filters will open to allow higher frequencies through or close to mute the following parts of the sound. This means for example you can get the filters working in time with a rhythm loop. Finally there's an input for an external signal to control the Envelope Modulation.

The fat bottom line

The bottom line is that this is a great bit of gear to have at your disposal. It could easily be integrated with the simplest of systems. Thanks to its Bypass mode you could keep it permanently attached to one of your Amiga audio outputs. In bigger systems it will work well used with an insert point on a mixer or via the external effects loop.

Because it's got such a distinctive sound you'd have to be careful about over using it, but then that's the case with most new musical toys anyway. Subtly different (ie. more limited) alternatives to the Resonator are currently being used on loads of dance tracks but in less than innovate ways.

The Resonator has the advantage of not only being the cheapest analogue filter bank on the market but also one of the most versatile. The Envelope Modulation section gives rise to all kinds of possibilities. With the polarity switched one way, you can instantly transform breakbeats and rhythm loops into something that sounds like funky ultrascan. Flick it the other way and your vocals turn to liquid, dripping from the back of the box like little acid riffs.

If you're into any kind of loop-based music you'll find this a fascinating tool. Simply take a loop, preferably with some good bass, mid-range and treble action in it, put it through this, set the filter to slide up and down very slowly then sit back and enjoy the ride. The Resonator will have a good go at sending you into a funky trance as it continually morphs the loop into new and interesting shapes, bringing out parts elements of the sound you never would have realised were there in the first place. Top stuff for techno, house and drum & bass producers in particular.

As featured on...

For those still unsure of the kind of sounds you can get from the Resonator, here's my top five list of tracks that make good use of an analogue filter bank (though not the Resonator specifically). They're all top tunes by the way, so don't be afraid to ask your friendly neighbourhood record shop assistant to dig them out for you.

Artist	Title	Label
1. DBX	Losing Control	Peacefrog
2. Winx	Don't Laugh	XL
3. Dark Comedy	The Bar	Elypsia
4. Dave Clarke	Southside	Deconstruction
5. Sonic Patrol	Bang Loose	M-Track

Worth every penny

It's not often we review hardware in CU Amiga that's not actually Amiga-specific. When we do, it's because we've come across something we feel is a bit special. That's exactly the case with the Resonator.

I bought this one from Turnkey Audio in London (they're the official UK distributor) for £169 and I've got no complaints. Pick one up and you might not think you've got your money's worth, a it's lighter than anything else you're likely to have in your audio set-up, but as far as I'm concerned it certainly delivers when it comes to churning out wild and fat sounds. I didn't actually intend to review it in the mag, but I was so pleased with it I couldn't keep the secret to myself. If you're into more 'conventional' music production, I couldn't say that you'll definitely find a use for this. It won't make your music sound more 'realistic' that's for sure!

However, I'd recommend anyone who wants a new secret weapon in their sonic armoury gets their hands on one as soon as possible. ■

Tony Horgan

Do you really need one though?

The answer to that question depends on where you want to go with your music. If you just used it like many would suggest, to make a digital synth sound more analogue, then no, it's not really worth it. However, if you want to transcend the capabilities of your Amiga samples and any other equipment you might have, then it certainly is. Mutate your breakbeats, disembody your vocals, reduce entire tracks to bass-bin flapping monster heartbeats...

THC-00 RESONATOR

Developer: Freeform Analog Technologies

System Requirements:
Any sound source to feed through it (such as your Amiga)

Ease of use 90%
Anyone can get it to make excellent noises, although understanding it properly could take a little time.

Performance 92%
Loud output but extremely quiet where noise is concerned. Makes fabulous noises too!

Value for money 90%
Showing up alternative filter banks priced upwards of £300. Why pay more for less?

OVERALL
A superb addition to any tech-music maker's studio.

92%

Desktop Publishing

Professional Page 4.1

PART 9

Here to help you get your images from DrawStudio Lite into ProPage is Larry Hickmott with some extremely useful tips and hints.

Since CU Amiga gave you the fabulous DrawStudio Lite, I have received quite a few phone calls about getting images from DrawStudio Lite into Professional Page, another package given away on the cover of your favourite magazine. So in this workshop, I want to discuss this in depth by giving you a number of examples and how they should be treated when taking them from DrawStudio Lite and into ProPage.

Lets start by looking at the compatibility question. We all know that the Amiga standard bitmap format is IFF-ILBM. This can be used in any number of Amiga applications and I can't remember the last time an IFF-ILBM bitmap looked screwed up after being loaded into an Amiga application. The upshot of this is that in my opinion, the IFF-ILBM is by far the best type of graphic to use when you want a reliable format supported by the majority of Amiga applications.

Compare this with the compatibility of structured formats. In my time, I have seen DR2D-IFF files (the Amiga structured standard format) look fine in one application like ProVector 3 and then appear completely screwed in another program such as ProVector 2.

The reason I used ProVector as the example was because here we have the same application but different versions and still you can have problems with structured graphics. To be fair to ProVector, I have seen the same mixed results when using the same image in around four or five Amiga applications that support DR2D-IFF. Which is one significant reason why I don't recommend using structured format files.

I don't know about you, but I want consistency when moving files from application to application and the only graphics format that gives me this is the IFF-ILBM. This is of

Exporting from DrawStudio Lite

Example 1: Here we have a title to be used as a masthead for a magazine front cover being created in ProPage. This masthead could never have been done in ProDraw, Art Expression, ProVector or ProPage itself. At the moment, it's a structured object within DrawStudio Lite but I want to be able to import it into ProPage at a resolution suitable for printing on an Epson Stylus at 1440dpi.

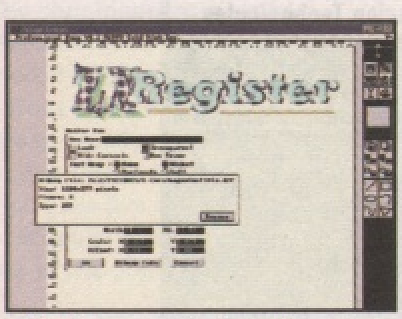
Your first step is to make sure that only the objects you want to export are selected. Then choose from the Project menu the item, Export/Bitmap (in version 2 there is also an Export/PostScript option). As soon as you do this, DrawStudio will pop-up a requester asking you which objects you want to export. Click on Selected Objects.

The next requester is very important because from here, you control the output resolution, the colour depth and also whether you want anti-aliasing applied. This latter option is normally ghosted except when you export as "8-bit Grey". In DrawStudio 2, you can also have anti-aliasing on with 24-bit colour export.

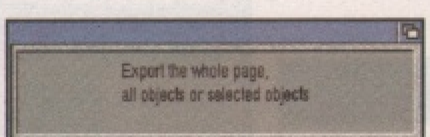
For normal use, such as when printing A4 size covers with a desktop type printer, I'd choose a width of 1200 pixels. There is no science in that choice, I just know that I don't get any pixelisation or jaggies when I spread the image across the width of an A4 page in ProPage. A little tip here is to make sure that you hit the return key after typing the figures into the Width box. Providing you've "Retain Aspect Ratio" ticked, the height is entered for you.

When you have set the attributes, click OK and for a short while, DrawStudio Lite will stop and do the conversion after which, you will get a second requester, where you can choose the exported bitmap format and the file name. You may also notice that this requester can be sized, so if it's too small for you, stretch it until it is as big as you need. At the end of the Filename text gadget is a button which can be used for choosing the volume and drawer where you want the new file placed. As you can see, DrawStudio Lite supports many different bitmap formats and the one chosen depends on what application the image is being imported into.

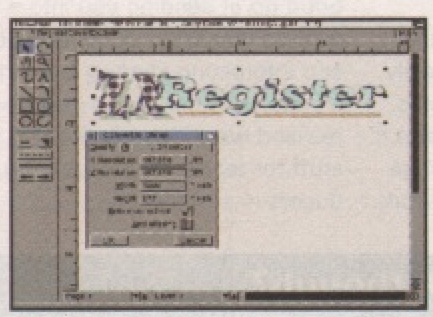
In our case, I'm using ProPage, so I've used IFF-ILBM. If you had PageStream 3 with the JPEG import module, you could choose JPEG. If you were creating titles for a WEB page, again, choose JPEG or GIF. To finish, click Export and save the image to disk. You can now run ProPage, draw a box across the top of a page and import to that frame, the graphic from DrawStudio Lite.



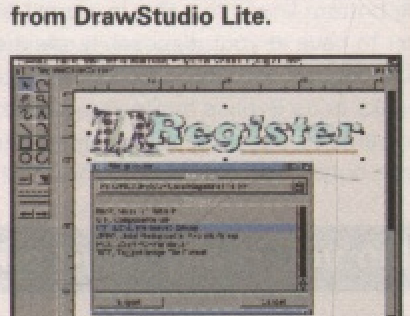
▲ **Here is an example of a masthead I created in DrawStudio for use on a magazine cover. By being able to set the export resolution, you can ensure the printed quality is of the highest standard.**



▲ **When you have objects selected on the page and you choose Export/Bitmap, click on Selected Object unless you want to export more than just the image.**



▲ **A key feature in DrawStudio is its ability to let you choose the resolution and colour depth of exported images. It's important when working with applications like ProPage because you can control the quality of the printed image by choosing the appropriate attributes.**



▲ **Being able to choose the bitmap format for export is handy. If you do WEB graphics you can use GIF, if you create stuff for ProPage you can select IFF-ILBM.**

Scaling Images in Professional Page

In general, there are two types of images you will create in DrawStudio Lite.

One is an image with lots of colours like a photograph, commonly called a continuous tone image. The second is a line art picture using a single colour such as black. Some examples of this are line illustrations, plain text and diagrams.

These are the type of images you can create in older drawing programs like ProDraw but you can also do it in DrawStudio Lite even though there is no provision to export as a structured object. The reason people prefer a structured format for such pictures is because bitmap line art can print horribly if a few basic rules are not adhered to.

I bet we all remember a lot of that really awful black and white clip art, which on-screen, wasn't much bigger than a postage stamp and when printed, was all blocky and ugly. There is a fairly important lesson which can be learned from such stuff. Size is everything!

Let's say you want to create a small diagram and you want to print it one inch wide. Because DrawStudio Lite is page based and objects created in it are structured, you can create it one inch wide. The crunch comes when you want to export it.

If you export it at the default resolution of 75 dpi and size it to one inch in ProPage, when you print it at 300 dpi or worse still, at 1440 dpi, you will get a blocky image. This is because the pixels making up the bitmap are 1/75th of an inch and the dots on the printer are much finer at 300th of an inch. This is a more simplified example.

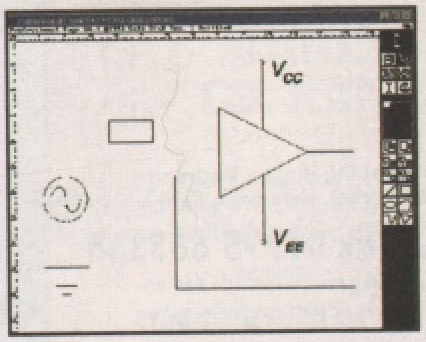
The solution is to export at a resolution equal to that of your printer. Let's say you have an Epson Stylus and want to print at 720 dpi. The resolution you should choose when you export the image would be 720 dpi or thereabouts. Also don't forget to set the quality to 1-bit for line art.

Here is all that again step by step. Create your image on the page at the same size you want it to appear when printed because this makes the mathematics of choosing the export resolution easier. Then select all the objects and choose Project/Export/Bitmap.

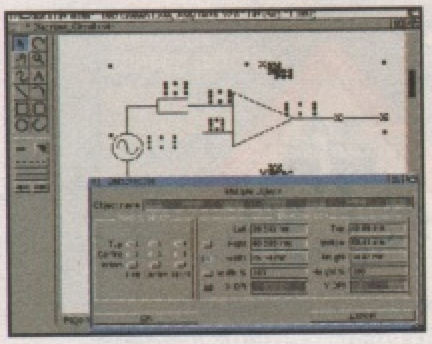
Click on Selected Objects in the next requester and then in the X Resolution gadget, type 720 and press return. Providing you have the "Retain Aspect Ratio" check box ticked, the Y Resolution gadget will be filled in for you also at 720 dpi.

Continue the export to disk and then load the image into ProPage. Make sure the box for the image is one inch big and then print. You will see no jaggies and the file size is just 7 kilobytes.

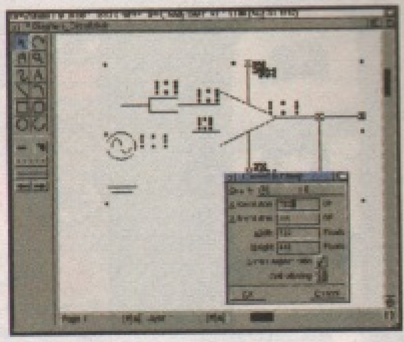
There isn't any reason not to use this method. There will however be those who will say, "but what do I do if I want to scale it bigger". Easy, you export it again at a higher resolution or do that in the first place because it's always better to make it too big and scale down than too small and scale up.



▲ Diagrams from DrawStudio Lite can easily be created and exported for use in Professional Page. Just make sure you create the diagram at the actual size you want it printed on paper at, and then choose the maximum resolution of your printer when exporting from DrawStudio Lite.



▲ If a diagram has been created at the wrong size, it can be scaled in DrawStudio Lite to a size you require using the Object/Specs menu item. Make sure to group the objects first.



▲ When exporting a line drawing with just a single colour (such as black), choose 1-bit. If the image has more colours, choose 8-bit colour or 8-bit grey.

course, supported by DrawStudio Lite. Anyone bemoaning the lack of support for structured formats in DrawStudio Lite would do well to remember what I've discussed above before getting too worked up about it.

That isn't to say DrawStudio Lite doesn't support structured formats because it will Open DR2D-IFF and DrawStudio 2 has support for the export of PostScript and EPS files for use in programs like Wordworth and Final Writer.

But even though DrawStudio 2 supports this, it isn't something I recommend because of the compatibility issue and also the lack of creative freedom when using such formats.

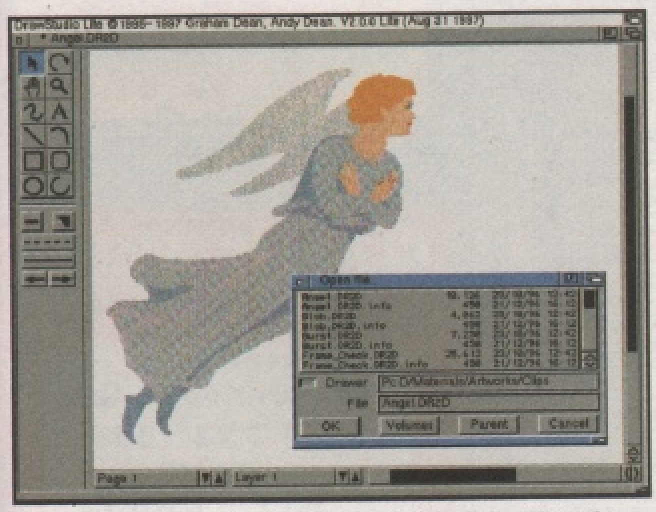
What I mean by this is that if you're using a bitmap format, you can quite happily make use of all of DrawStudio Lite's wonderful features without having to worry about whether or not these are supported by the chosen graphic format. The only proviso I put on this is that DrawStudio Lite lacks 24-bit support (supported by DrawStudio v2) and that 24-bit capability is required for transparency export. If you use 8-bit greyscale however, you can use transparency as much as you like.

There are a few other things about structured formats I should also point out. Those of you who have seen DR2D-IFF files or even CGMs, will know how simplistic the drawings are. No room for the use of transparency and bitmap fills with such formats and these are further reasons I don't recommend the use of such file formats except possibly when you want to bring an image into DrawStudio to be edited.

In that case you can Open DR2D-IFF files and then break them up into bits and use all the great functions in DrawStudio to change the look of the image to suit your needs before exporting the image as an IFF-ILBM or other bitmap format.

So don't fret about not being able to use structured formats when exporting images from DrawStudio Lite for use in ProPage or any other application for that matter. Bitmaps will print every bit as good providing you carefully choose the resolution of the image when exporting it from DrawStudio Lite. You will also have the advantage of being able to use many of the really creative functions in DrawStudio Lite without being compromised by the format of the file chosen when exporting the image. ■

Larry Hickmott



▲ Drawings such as this DR2D-IFF one from the people at Artworks, can be loaded into DrawStudio Lite and then various parts of the drawing changed by applying bitmap fills. This is just one reason why DrawStudio Lite is significantly better than older drawing programs which only allow simplistic colouring.

Upgrade Information

Upgrades from DrawStudio Lite and printed manuals for Professional Page are currently still available.
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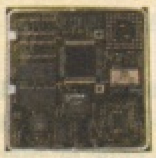
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Q&A

Never mind how baffling your technical problems are, put them to our panel of experts and they'll do their utmost to astound you, with in-depth knowledge and solutions. Don't forget to give us as much detail on your systems and problems as possible.

Logos

Mysteries and meanings...

WORKBENCH — **Solutions to those everyday troubles with your Workbench.**

EXPANSION — **If you need help getting more from your Amiga, just ask!**

COMMS — **All your Internet and general comms problems swiftly solved.**

SOUND — **Trouble making your Amiga sing? We've got the answers here.**

HARDWARE — **Technical matters beyond the scope of plug-ins and plug-ons.**

SOFTWARE — **Answers to queries on particular pieces of software.**

HELP — **General queries which just don't seem to fit in anywhere else.**

CD-ROM — **Specific help with CD-ROM solutions and driver problems.**

GRAPHICS — **Problems with art and design? Help and advice is at hand.**

PERIPHERALS — **Printers, monitors, we'll solve your peripheral blues for you.**

Practical printing

PERIPHERALS

I'm upgrading my system following a static period of about 4 years, having recently bought the accelerator/RAM/CD. Could you please answer the following questions:

1) With a maximum budget of about £200, would you say that the Epson Stylus still rules the roost as printers go? If not, which printer do you recommend? I'm looking for a clean, crisp output with word-processors such as Final Writer and Wordworth and decent quality graphic-dumps (I do a lot of image processing using Vidi Amiga RT to get my basic images and then use Vidi, Image FX, PPaint and DPaint 4 AGA to process and manipulate them).

2) Would Workbench 3's printer-drivers be adequate to drive the printer or should I buy a dedicated print-program such as Turbo Print? I've heard that Gateway 2000 have struck a deal with Epson to supply Workbench drivers with future printers; am I better off waiting for these to arrive before I purchase a printer? When is this likely to be?

3) Would adding a SCSI interface to my accelerator allow me to add a ZIP-drive (I don't want to have to keep disconnecting the CD-drive to use it)? My four year old hard drive is getting quite full now but I'd rather not bin it and replace it with another, even though for the price I paid you can now get over 1 Gb.
Hope you can help.

John Orrell, Blackpool

1. Yes, basically. The HP deskjets are nice, solid desktop printers and have a slight edge on black and white, but for colour work the Epson Stylus range are as good as they come. Hunt out the Epson Stylus 600, it may be a gnat's over your budget, but it is worth it. The 400 is a very able printer for enough under your budget to afford Turboprint or Studioprint too, but the Hewlett Packard 690c is a very tempting alternative to this lower resolution model.

2. No, even when the new drivers come out they are unlikely to be as good as such a specialised piece of software. The Workbench drivers tend to be acceptable for black and white, but the colour balance, dithering and so on that make for a really good colour output you will only get out of a professional package.

3. You don't make it clear, but if you are using a squirrel interface then you have a SCSI connection. Up to seven devices can be connected to a Squirrel. Check on the back of your CD player and you should see an output SCSI socket. The Zip can connect to this. You will have to remember to set the SCSI ID of the ZIP differently to that of the CD-ROM, and you will have to remember to set the ZIP as the terminated device, not the CD-ROM drive. You should find a full explanation in the Squirrel manual. Otherwise, yes a SCSI connector on your accelerator will do the job just fine.

Broken PCMCIA

HARDWARE

I bought a CD-ROM drive some months ago, connected to my A1200 via the Squirrel interface. My problem is that I also had a memory board fitted with all 8Mb configured, and the programs started to crash.

I didn't know then that you can only have 4Mb or it will clash with the PCMCIA port, so if you could answer these questions I'd be very obliged.

1) I've broken a few pins in my PMCIA slot, can I get it repaired?

2) If not, which would you suggest, get another second-hand A1200, or an accelerator with a SCSI interface?

3) Also, which would be the biggest hard drive that I could get hold of for around £100? (2.5 or 3.5)

Carl Handley, N Wales.

1. They're a right pain those micro pins on PCMCIAs. You would not believe the number of A1200s with broken PCMCIA ports we've got lying around. The PCMCIA port would have to be replaced, a fiddly task but not impossible. Contact any of the repair houses that advertise in the mag and ask them how much they would charge, then decide for yourself if it is worth it!

2. If it is just the SCSI adaptor you want the PCMCIA for then don't worry about it, go for the accelerator with SCSI. Not only will you get an Amiga that is faster and far nicer to use, but if you get a card with a really good SCSI adaptor such as the Blizzard, you'll have damn fast SCSI too.

3. The one with the most storage space I would guess. The tip is to look at adverts in mags, visit your local shop and look around. It is pointless asking us to do this for you as by the time you read the answer it would be wrong. Hard drive prices seem to drop every couple of weeks.

Prepping up

PERIPHERALS

I recently bought a new 1Gb hard disk at an auction. I've fitted it in my controller but my Amiga doesn't recognise that it's there. I'm using an Amiga 500+ with the GVP SCSI controller.

A friend of mine, who knows lots about Amigas, said I needed software to prep, install and partition the drive – and that there was still a place selling GVP equipment/software in Germany. Could you give me the address or tell me of some other place I could get this software?

Iain Coleman, Plymouth



▲ The Epson Stylus photo – top of the range colour inkjet, but baby brothers Stylus 400 and 600 do a great job on a tight budget.

The GVP SCSI controller was shipped with a disk containing GVP's software package for formatting, partition and prepping of drive. If you have lost your disk, any PD library should be able to supply you with a disk of hard drive prep tools.

GVP still exists, sort of, as GVP-M, who bought out much of the old GVP when they went bust. You can ring them in the states on +1 215 633-7711 or ring their UK distributors Power Computing on (01234) 851500. If you have internet access, visit their website on www.gvp-m.com where you can download the latest version of their expert prep software.

Assign too many

I've an Amiga 1200 with a 3.5" 2.1Gb hard drive and I have an error come up on the DOS screen just before I get to the Workbench screen. The message is: can't find WORK:/GAMES/T.

So far it hasn't done any damage to anything. I've also run WORK through Quarterback tools from your excellent cover CD to try and repair it. It doesn't work so please can you help me with this annoyance? Keep up the splendid work and long live the Amiga!

Craig Nixen, Sheffield.

You will be glad to know that this is a simple problem, and rather a common one too. As your machine boots up, it runs a list of commands in a file called user-startup in the "s" directory of your Workbench. When you install a program, it isn't uncommon for it to add commands to this file.

The most common one is what is called an assign, a command which tells the computer where it can find the program you have just installed. Somewhere in your user-startup, there is a command, probably an assign, calling to the directory work:games/t.

It is almost certainly an assign to a program you installed and then removed. If you load s/user-startup into a text editor (such as ed which comes with Workbench) you should quite easily be able to locate the appropriate line and then remove it.

If you are unsure about what you are doing then rather than deleting the file, put a semicolon in front of the line. This "comments out" the line, meaning the instruction will be ignored. If you do this, it is easy to reinstate the line if things go wrong by just removing the semicolon.

If you are too nervous even for this, there is a solution, but it is a bit of a sellotape and string fix. Try opening a shell and typing:

```
makedir work:games/t
```

This will create an empty directory for an assign to read to. There are circumstances in which this won't work, and you'll have to follow the solution above.

How many questions?

I do have quite a few questions that need answering. So I'd be grateful if you could please help me?

1) Where can I get an A4000T in the case design, like the one that you printed on page 97 in the November issue?

2) Can I still get an original A4000 keyboard and mouse?

3) In a rival magazine I read that the A4000 came with a HD floppy drive that can format up to 1.76Mb. Is this true?

4) If I can get said keyboard will I have; Ctrl, Amiga, Amiga reset, plus a button on the case?

5)What exactly is AHI?

6) Can I fit Kickstart 3.1?

7) Can I have 4 SIMM slots on the motherboard?

8) Can I have 8Mb of Chip RAM fitted?

9) Can Zorro III slots take Zorro II cards, PCI cards and RAM cards?

10) Can I have 2 video slots totally separate from the Zorro slots?

11) Does Workbench 2.X + recognise hard disks bigger than

Tech Tip: Linguistics

OK, we're going light on the techy stuff this month. No, we aren't going to stop giving you the inside story on everything Amiga, we're just going to do it in a lighter, fluffier, more Christmassy sort of way. Put aside your screwdrivers and lay down the soldering iron, for this month we bring you a quick guide pronunciation. So, for the benefit of all those people who call us up asking for help doing 3D renders with their old "immer-jine" cover disks or talk about LightWave "aminations" – some of the weirdest readers and some well known Amiga professionals both – Haypey Tchrissmarse.

AGA – ay-gee-ay:
Aga (ahgah) is a kind of stove, not a chipset.

Aminet – am-ee-net:
Not Amy-net. Whatever anyone thinks, even Urban Müller. Same story for many other words beginning in Ami. You wouldn't talk about an Amy-gah 1200 would you?

Cache – cash:
We've often wondered what a level 2 catch was.

CPU – see-pee-you:
If anyone knows what a PCU is please tell us.

CU Amiga Magazine – see-you ah-mee-ga mag-ah-zeen:
That's right, like how it is spelt. No, those are initials, it isn't Coo Amiga. Nor is it a silent CU, we are not called Amiga Magazine. Oh, and for the sake of our northern readers, magazine is pronounced "mag-ah-zeen", not "booke".

GIF – gif:
The G stands for graphics, not jraphics. Hence gif, not jif. Simple, but we get this one wrong all the time.

Imagine – im-adj-in:
This is a standard English word and is pronounced exactly the same, no strings attached.

Jpeg – jay-peg:
Just think of a small bird with a wooden leg.

OS – oh-ess:
Pronounce the letters not the word. Oss is horse in illiterate.

SCSI – scuz-zee: Pronounce the word not letters... fussy eh.

Tyschtschenko – tish-tcheng-coe: Well... probably!?

4Gb?

12) Does Workbench 2.X + recognise hard disk partitions bigger than 4Gb?

13) Why do I need a graphics card and what do they do?

14) What do I need to start music sampling/recording etc on an Amiga?

15) Can I have an internal ultra wide and fast SCSI 3 in place of the standard SCSI?

16) Can I also have an external 50 pin centronics style SCSI 3?

17) Are the Commodore 15 pin 31 KHz monitor adaptors still around?

Mr C Hall, Nottingham.

You're certainly a curious sort aren't you. Is 17 questions enough? Are you sure you don't have a few more things that need clarification? OK, let's get this over with.

1. You can't. That isn't an A4000t, it's an A1200t in a Micronik tower case.

2. Yes, but you'll have to shop around a little.

3. It is shipped with an HD mechanism, but configured to work as a 880k drive. There is an alternative drive which happily formats 1.76Mb but it's unlikely you would find one shipped as standard. Blittersoft will sell you one for around £55. Call them on: 01908 261466.

4. Yes.

5. It is a program for handling Amiga music. It is what is known as a retargetable system, which means that a program can send sound data to AHI instead of the hardware and then AHI can send it to whichever hardware you happen to have.

This means that a program need only be written to send sound out to AHI rather than for every possible sound card someone might want to use with it.

6. Check out the advert for Power Computing and you should see the range of OS3.1 chips/Workbench bundles they do. Of course, if you have a nice up to date OS3.1 A4000t you aren't going to need to upgrade.

7. You don't have much choice!

8. No. 2Mb is the absolute limit on chip RAM.

9. Zorro 3 takes Zorro 2 card but not PCI cards. No Amiga currently accepts PCI cards, but watch this space.

Zorro is not where you plug ram cards in, that's what the SIMM sockets are for.

10. The video slot is for getting video information to a Zorro based graphics card. You don't want it separate from a Zorro slot.

11 and 12. Amigas on the whole do not recognise a single partition larger than 4.3 Gb, but this problem can be solved by having multiple devices or using one of the various partition size hacks.

13. Graphics cards output images faster, more colourfully and at higher resolutions than Amigas without. You will be able to run a high resolution Workbench with thousands of colours without flicker and it will still move more smoothly and quickly than before.

14. That is rather beyond the scope of an answer in Q&A but the basic answer is that first you will need to get a sampler. 8 bit will do for casual work, but for high definition sound quality you need 16 bit. You can go for a parallel port or PCMCIA sampler on an A1200/600 but much better is to go for a sound card on a Zorro machine. You will need to invest in a decent microphone if you want to record live, and you will need plenty of hard drive space for samples. A good sample editor is a must – check out the review of HiSoft's Sound probe elsewhere in this issue, and you'll need a decent tracker such as Octamed Sound Studio. We still have a few copies of our March issue with OSS on it, so turn to the back issues page now!

15. Yes. It's all a matter of the adaptor you use. The new phase 5 accelerator boards come with ultra wide SCSI 3. SCSI does not get much faster.

16. Yeah, if you buy the right cable. SCSI has loads of different connectors on it, just get the cable that matches the two things you want to connect.

17. Yes, check out the ads, there are loads of companies advertising that or identical products in this very magazine!



A1500 – the next generation. The Micronik tower confusingly shares a name with an old A2000 like release from Commodore.

A1500 or A1500?

EXPANSION

1) I'm thinking of buying an A1500. Does it come with Zorro slots?

2) If not, what busboard can I buy (maybe a Micronik one)?

3) I read in my local classifieds of an 'A500 upgraded to A1500'. Is this possible?

4) How can I attach a busboard to my brothers A600?

5) If there isn't any commercial option, can you please, please show us how to DIY one?

6) How much do you reckon Forgotten Forever will cost, and will you have a demo of it soon?

Thanks for answering my questions and please (if you've got any) can I have one of those lovely Amiga stickers?

Simon Preston, Birmingham.

1. Yes, the A1500 comes with Zorro slots. However, what people mean when they say A1500 is not necessarily clear, there are two different machines called the A1500.

One is a desktop machine almost entirely identical to the A2000, with Zorro 2 slots and OCS graphics, with Workbench 1.3 or 2 if you are lucky, the other is the newly released Micronik tower machine based on the A1200. It has Zorro 3, AGA chipset and an A4000 style accelerator slot.

Make sure that you know what you are getting, these are two completely different machines.

2. The micronik busboard is the best known one. There is also one from RBM, and the soon to be released Ateo busboard.

The Ateo differs from the other two in that it is not Zorro, but cards for it will be a lot cheaper. It is expected to be a similar cost to the other two but come with a graphics card.

3. I would guess that this means an A500 in one of the very old upgrade cases to make it like the original A1500. An A500 cannot be made to work like an up to date AGA, Zorro 3 Micronik A1500.

4. The A600 does not have an accelerator slot the way the A1200 does. Someone in theory could build an A600 Zorro busboard but it would involve a lot of difficulty to attach trickery and would sell far too little to pay back development costs, so don't wait up.

5. No, sorry. A Zorro board would require custom chips to be made up, wouldn't save much money and you'd have to be able to confidently solder hundreds of tiny surface mount components and expensive CMOS 'touch-'em-and-they die' chips into a delicate multilayer plate – through PCB. Forget it.

6. Details on Forgotten Forever are a little sketchy at the moment. The publication has not been sorted out yet so no price is fixed, but £29.99 is a pretty normal price these days. We will put a demo onto the CD as soon as there is one to put on!

A to Z

All you festive bunnies get into the spirit of things by compiling a list of top-notch pressies from Santa Claus... On the other hand, John Kennedy fills his stockings by listing Amiga related D Words !?!

D is for...

Datatype
A unique Amiga concept, which separates an application from decoding data. Applications which support Datatypes can save and load information stored in any format: as long as a Datatype exists.

There are Datatypes for almost all file types including GIF and JPG graphics files.

Date
AmigaDOS command which either displays the current system time and date this will only be accurate if the Amiga has a battery-backed clock. Date can also be used to set the time from the Shell, in which case the battery backed clock (if present) will also be changed.

Debug
The act of checking a program for errors. There is also a "secret" debug menu option available from the Workbench which provides options for clearing unused memory and starting RomWack mode; a little known debugging facility which allows the Amiga to communicate with another terminal over a serial link.

Default Tool
The name of the application which a file will launch when it is double-clicked. For example, a text file may have the name of your word processor as its Default tool.

Delete
AmigaDOS command for removing unwanted files and directories. This is a powerful command, especially when used with wildcards and pattern matching, so you should treat it with some respect.

Files which have been deleted cannot be recovered, at least with standard AmigaDOS commands. You will need to resort to a program such as AmiBack or Quarterback Tools, and even then there is no guarantee.

Depth Gadget
Most Amiga Workbench windows have little buttons in the surrounding frame. The button which usually appears in the very top right is the Depth Gadget, it shuffles the window so that it appears in-front or behind of other windows.

The Click-to-Front commodity is useful if you don't like the confusion sometimes incurred by the Depth Gadget.

Device
In Amiga terms, a Device is either a physical entity (such as a disk drive, printer or serial port) or a piece of software pretending to be a physical entity (such as a pipe or ram disk). A device is where data is sent when you want something to happen, or where data is read from.

The software which provides the interface between the Amiga system and the device is called the "device driver".

Devs
The directory which contains the list of Device Drivers used by the Amiga.

DH0:
Common name of a hard drive fitted to an Amiga. This is the name of the first partition on the drive: subsequent partitions are named "DH1:", "DH2:" and so on.

You can change the name using the DiskTools utility, but beware: some programs will still try and reference DH0:. You can get around this by using the ASSIGN command, for example, "assign dh0: newhd0:".

Dir
An AmigaDOS command which generates a list of the files and directories contained in the current directory. If a path is provided, then dir creates a list of files at that location.

Directory
Part of the file system, and a way of keeping similar files together (or different files apart). Although the files are all stored in one place on the disk it is possible for you to create virtual directories in which files can be places.

For example, the C directory on the Amiga Workbench disk contains all the most useful AmigaDOS command, whereas the DEVS directory contains the device drivers.

DiskChange
An AmigaDOS command used to inform the operating system that a drive now contains a new disk. This is normally not required, as the Amiga is constantly checking the floppy drives to see if anything new is inserted.

However, with older drives (for example, 5.25" drives) or some removable hard disk systems, this command might be needed.

DiskCopy
An AmigaDOS command, and a very useful one at that. DiskCopy makes a duplicate of an ordinary, formatted AmigaDOS disk. Use it to back up your Workbench boot disks or coverdisks. It cannot be used with protected disks (such as games).

DiskDoctor
Included with earlier versions of AmigaDOS, DiskDoctor could be used to try and rescue data stored on corrupted floppy disks.

Sometimes it worked, most times it didn't. One annoying habit was the way in which DiskDoctor renamed the disks it worked on as "Lazarus", this triggering countless virus scare stores.

DiskSalve
Vastly improved version of DiskDoctor, which also supports hard disks.

Display
An AmigaDOS command which launches the utility used to select the current Display Mode.

Display Mode
The combination of screen resolutions (the number of pixels across and down), screen colours and refresh rates which define a particular display.

The Amiga has hugely flexible screen modes, ideal for both games and applications. A plug-in graphics card expands the number of Display Modes still further.

Dithering
A process for faking colours, for example, a screen mode may have only sixteen colours available, but by displaying neighbouring pixels in colours of the right proportions, other colours may become visible.

Also used by black and white printers to give the impression of shades of grey.

Dork
Person who writes virus software, or complains about the price and lack of decent Amiga software whilst simultaneously copying commercial software from their mates.

Double-click
A quick mouse-clicking action performed on an icon to launch a program. A single-click selects the icon, a double-click starts it loading.

Drag
A selected icon can be dragged to a new location if the left mouse button is still held down whilst the mouse is moved.

This can be used to reposition icons, or "drag and drop" files to new locations or onto special "App Icons" which appear on the Workbench. For example, Personal Paint creates an AppIcon on the Workbench: drop a picture file onto it, and it will be loaded and displayed automatically.

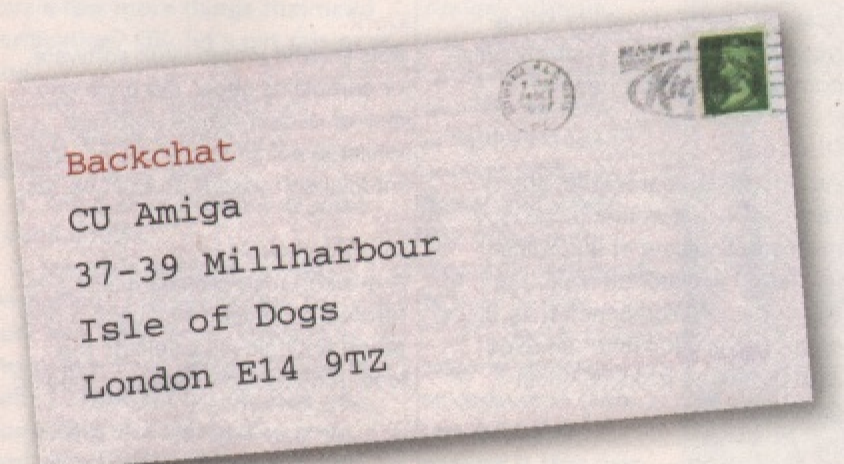
Drawer
Even though the Amiga file system does support directories, you're quite possibly more familiar with Drawers.

These are directions which appear when you look at the icons stored in a disk. In fact, they are simply icon files with the same name as the directory: for example, if a directory called "games" has an associated icon file called "games.info", then you can open the directory and see what is inside by double-clicking on the icon.

From the Shell, typing "dir games" would have the same effect.

Backchat

What have you got to say for yourself? Hmm? Well come on, out with it! Put your point of view down on paper or E-mail it to: backchat@cu-amiga.co.uk



Barmy from Burnley

As a perfectly sane and clear-headed person, I consider myself within my rights to express my undying feelings to you on what a truly super-duper magazine you write for us Amiga-owning folks. Can I please have a signed photograph of Kirstin Ritchens?

Oh, by the way, I have a (potentially) really cool idea for a future hardware project – as a Jean Michel Jarre wannabe, I have a huge keyboard, loads of crazy sound samples and a large cape for prancing around on stage. All I need now is a laser and some way to control it from my humble '030 A1200. Any ideas?

Absurdity Personified, Alpha Centauri

We shouldn't really be printing this. It'll only encourage him. Kirstin, the CU Amiga marketing dynamo, is unfortunately unavailable for autograph signing at the moment. As for your laser control problem, try our AIR Link project from the November issue of CU Amiga.

I'm cracking up

The CD-ROMs on your covers are tops – no question. However, on collecting the last one I noticed the plastic case was badly cracked. The girl said "Yes, go and pick any of the others". The sad thing was that only one out of six cover disks was not so damaged. This has been noticed in Smiths too. Would it be practicable to pack these mags alternately – one right way up, the next upside down? That would mean a saving in depth.

Hector Davidson, Somerset

Nice idea, but not practical really. When you took the first one off the shelf, the next would be upside down or back to front, which wouldn't do our sales any good. However, if you do get a bad disk you can return it to our normal disk returns department for a free replacement.

Double vision

While wondering about monitor options I had an idea that Gateway could incorporate into the next Amiga. How about having two display channels? For a start you open up a new era of two player games – battleships, racing games with dual viewpoints etc. Education programs could have teacher/pupil screens. But best from my point of view would be two screen paint programs.

John Gray, London

Not a bad idea that. A new Amiga certainly needs some unique selling points, and this would be one. There are loads of potential uses, not least video work. What about it then Amiga Inc?

User groups

The main point of my E-mail is Amiga user groups. What has happened to them all? During these hard times, which I might add are starting to look very promising, Amiga users need contact with each other whether by magazines, the Net or BBSs, but what about Amiga user groups?

I can remember when nearly every county in the UK had an Amiga user group. How about a page in CU Amiga for groups to advertise or for individuals to try to make contacts in there area (free of course)?

No name supplied.

We'll do just that. Anyone who has a user group, or wants to start one, should send their details to:
User Groups, CU Amiga,
37-39 Millharbour,
Isle of Dogs,
London E14 9TZ. If and when we get a few, we'll start up a regular column with contacts for user groups the world over.

Mac gaming

After reading your excellent article



▲ Mac gaming: great idea, but how do you get the ROMs over to your Amiga?

"How about having two display channels? For a start you open up a new era of two player games – Battleships, racing games with dual viewpoints..."

Letter of the month

Return of the Grays

I hope this letter reaches you before any harm has been done. I built an AIR Link from a kit of parts and had been testing it with my VCR remote control when a friend of mine saw it and asked me to get him one. My downfall came when I connected it up to my spare A1200 and had two computers operating from the same remote controller.

I wandered off to get my beans on toast for tea, and I think I remember the lights in the kitchen flickering a little. I was not prepared for what confronted me on my return to the living room. Both computers were scrolling garbage up their screens. I went over to my main Amiga in order to reboot it, but as I approached, the monitor flashed blue and purple and crackled ominously.

I turned around and started towards the mains power socket. As I got closer, both computer screens started acting up. First the text slowed down and then the intensity started increasing to levels a cathode ray tube just can't handle. I backed off. I swear they were talking to each other.

I left in a hurry to find re-enforcements. All my dad would say is he's been expecting something like this for ages, and set off for the cellar to switch us off at the main fusebox. For some reason the isolation switch was on. The electric meter was clocking up power at a rate we'll never be able to pay off even now the VAT's gone down a bit. [it goes on for ages but we'll spare you the rest – Ed]

John Gray, London

Not you again! One thing's for sure, you've got an active imagination! As for that bit about your neighbourhood having a power-cut at the same time (which we cut) has nothing to do with AIR Link, we can assure you. Try eating less cheese at bedtime, and avoid The X-Files for a while.

on Mac gaming, I decided that I'd write in with a few comments.

This is the kind of article which all Amiga users with half-decent systems want; we've all been told how ace the Amiga is at emulating the Mac, and now we know what we can really expect to run in terms of software. Who wouldn't want the chance to play the likes of Duke Nuke 'em 3D on the Amiga?

Having read the article, I'm positively itching to give Mac emulation a shot as was overjoyed to find the massive ShapeShifter software base on the TFX CD.

I still need to get my hands on the Mac ROMs though – could you tell us of a supplier who is willing to supply modern versions of both 500k and 1Mb ROMs in an Amiga-friendly format (i.e. not a Mac disk)? How much should I be looking to pay? Also, you mention that the Mac has an Aminet equivalent; where is this?

Ideally, you'd maybe then go on to run a feature on the rudiments of actually setting up / using / getting the most out of ShapeShifter (depending on how easy or otherwise it actually is), possibly even incorporating details of games suppliers at a good price and PD software on the cover CD.

A ShapeShifter feature would be at least as useful as the tower conversion series which you ran, although this (being software-orientated) would also be useful to people who don't like taking their machine apart. I realise that ShapeShifter comes with AmigaGuide documentation, but a bit of extra information written from a user's perspective or an 'idiot's guide' can't hurt (a couple of pages an issue for a couple of months). Besides, I find that printed

"I left in a hurry to find re-enforcements. All my dad would say is he's been expecting something like this for ages..."

instructions are far more useful than any on-screen documentation (especially having no printer).

Anyway, I'm hoping that – true to form – you'll try to help me here. I'm more than willing to shell out for ROMs, maybe a second hard drive and possibly Fusion – if it's better than ShapeShifter – just to play Mac games, and I doubt that I'm the only one.

Gavin Gunn, via E-mail.

Both ShapeShifter and Fusion include a program you can run on a real Mac which will save the ROM off to a file. Modern Macs can of course read PC disks natively so you can put in a PC disk (or format a disk as PC) and copy it over.

Now, some Mac ROMs are a full megabyte in length, meaning that if you've got a stock Amiga without a high-density drive you'll have to either compress the 1Mb ROM as something you can then uncompress on the Amiga (LHA, ZIP, etc.) or use a modem or null modem to shuttle it across.

Of course, you should only do this if you own a Mac or have otherwise legitimately paid for the Mac ROM in some way.

As for the Mac's equivalent of Aminet, it's called Info-Mac and is a very poor attempt at a definitive shareware software archive. You can access it with a browser at: http://wuarchive.wustl.edu/systems/mac/info-mac

Take a look there and you'll soon realise what an amazing resource we have in the form of Aminet, in case you'd forgotten.

Overseas offers

As an occasional reader of CU Amiga in the States I was thrilled to find the latest demo version of Turbo Print 5 on your cover CD. After using the program I am impressed enough to purchase it.

The problem that arises is since I am in the US, how do I go about doing the upgrade offer? Should I send the voucher to the UK and hope the shipping isn't too expensive (or the wait too long?).

Will the added postage would make it cheaper and easier to upgrade to the full version here and just pay full price? Or perhaps you know of someone honouring this offer over here in the US?

I'm sure you have addressed this in one of the latest issues of your magazine but I have not been able to locate an issue after the August '97 one to find out.

Any help would be welcome!

Johnny Mann, via E-mail

Unless it's specifically stated otherwise, all of our offers are available to all of the readers worldwide.

We don't have a US agent to handle the Turbo Print upgrades, so you should respond to the UK address. There will be an inevitable delay due to postage but these days international mail is a heck of a lot quicker than it used to be years ago.

More misinformation

I will come straight to the point. I want to do non-linear video editing. Looking round I find that PC systems using the MIRO DC20/30 or a host of other capture cards are plentiful, they usually come with Adobe premiere or the like and can also have 3D software for animations etc. How can the Amiga compete?

Yes I realise that I will need a tower system A4000, but I have been told by an Amiga expert not to both-



Continued overleaf ▶▶▶

er with the Amiga as there are no capture cards available. Can you help? If you cant I go PC.

P.S. I already have an A1200, accelerator, 10Mb RAM, 33MHz FPU, CD-ROM and a 540Mb hard drive.

Eddie, Milton Keynes.

You've been sold duff information, as is all too common. The Amiga is still used extensively in the USA for this purpose. There are two main video capture cards you should look at: VLab Motion and DPS Par. Both of them are designed for non-linear video editing. VLab is cheaper and uses an kind of JPEG/MPEG system while the DPS Par card offers higher quality. Call White Knight on 01920 822 321.

Norwegian Amigans

I have noticed that a lot of my fellow Norwegian Amigans don't know where to get software or hardware.

I have also noticed that you keep giving them Applause's phone number. Applause is currently cutting down their Amiga support, but there is another company that is completely Amiga-specific. It's called Sezam Software, and their phone number is 55 10 00 70. You can also find them on the Internet, at http://www.sezam.no.

Other companies that might have something of interest in stock are:
Data Ressurs: 55 93 08 27
Amico: 52 82 09 05
Datakompaniet: 73 54 03 75

Oh by the way, even if Applause seems to be deserting us, keep calling them about Amiga stuff. Perhaps we can make them change their minds. And to you wonderful people at CU Amiga, thanks for the best mag in the world.

Kay Are Ulvestad, Norway

TFX for PowerPC?

Do you think it would be possible to include some hack on your CD to allow TFX to run at fast speed on a PowerPC Amiga?

John Haydon, via email

It might be possible, but in practice it would be much more than just a hack. It would really be a complete re-write. For a start, half the TFX code is written in C, but the more time-critical routines are in optimised assembler. That would mean going back and rewriting it all in C in order for it to be ported to PowerPC code.

There are other concerns too, not specifically regarding PowerPC conversion, but tricks such as using the copper to control the display (rather than chunky pixels) makes adding graphics card support quite a task. A PowerPC version of TFX that was still limited by the AGA chipset would fall far short of its potential. We are looking into this though, so keep reading CU Amiga for more details.

Where's WOA?

After the World of Amiga show in May, you said there was talk of another Amiga show before Christmas. Since then I've heard nothing, despite keeping a keen eye on your mag. Have I missed it, or did it just not happen?

Jamie Stevens, Croydon

It just hasn't happened for one reason or another. After the Amiga's good showing at Cologne in November (see News) it would seem likely that a World of Amiga or similar show will be sheduled for Spring or early Summer 98.

> **"That purchase opened me up for another side of life, no longer did I garden or even nag the wife"**

Poetry Corner

I don't know whether you welcome non-technical contributions but I have penned the attached just in case. I am a retired "non-technical" computer devotee with an interest in art programs, card games etc.

Please feel free to use it as you wish for the entertainment of the readers, or consign it to the nearest trashcan if you deem that necessary.

Computeritis – Sam Quigg1997

I bought my first computer when I
retired from active toil,
Against boredom and stagnation it
would be a perfect foil,
To make some video titles and even
write a letter,
It seemed a perfect panacea – I
could think of nothing better.
I saw an advertisement in my
local grocery store,
Midst cards for massage parlours
on a board beside the door,
It said, "I have for sale a Spectrum
grey plus two,
Just part with five and twenty
pounds and it belongs to you!".
That purchase opened up for me
another side of life,
No longer did I garden, or even nag
the wife,
Every waking moment saw me
alight with joy,
As I strove to understand the whims
of my little toy.
Soon I mastered Clive's machine
and yearned for something more,
So once again I visited the local grocery store,
To view the cards upon the wall was
my mission clear,
Lo and Behold!! upon a card the
word "Amiga" did appear.
An Amiga A500 with many
games on disk,
At a hundred quid it was really
worth the risk,
For with it came a printer and an
extra memory board,
And an external floppy added to the
hoard.
With the new found purchase I
really went to town,
Playing games like "Armageddon"
and others of renown,
But alas word processing brought a
pang of fear,
The dreaded "Lack of memory" sign
on screen it did appear.
An A1200 came my way, again at
a bargain price,
Just like new it was, and really very
nice,
With dedicated monitor and sound
in stereo,
Now I've added "SAYMORE", so it
can say "Hello".
This wonder tool at last satisfied
my need,
Until I succumbed again to the lust
for speed,
By adding an internal storage disk
type hard,
And stuffing in the trapdoor slot a
four meg memory card.
Have I conquered my addiction,
will this all now do,
Still I have some other plans, for as I
write to you,
A CD-ROM and Squirrel are fitted
now of course,
And a Blizzard board is coming,
courtesy Parcel Force!

Sam Quigg, Limavady, N. Ireland

What a pleasant little ode. All you need to do now is dig out your copy of SoundStudio, plug in your sampler and put it all to music.

To the Point...

Deal Amiga Club

Could you mention our club? The Deal Amiga Club meets on Friday night 7pm till 11pm.
It's at:
St John Ambulance Hall
Mill Hill
Deal Kent

Deal Amiga Club, via email

Consider it mentioned.

Quick questions

Could you please tell me what Zorro slots are and what is the difference between a 68060 and a 68030 both running at 50MHz.

Paul Greatorex, Bridlington

Zorro slots are expansion slots found on 'big box' desktop and tower Amigas. You could answer the second question yourself if you tried. The 060 is much faster – that's the difference and you don't need to know any more. Take a night school class in semiconductors if you really want to know more, or just keep reading CU Amiga.

You spill my pint?

As the central hive of Amiga knowledge, I am turning to you to settle an argument that I keep having with the landlord of my local pub. It's about an old game: R-Type.

He says the Amiga version was released under the name Denaris by mistake and it was then re-released under the proper R-Type name. I say he's talking rubbish and there never was a game called Denaris. There's a free pint in it for me if you say I'm right.

Ian Morgan, Tadworth

It looks like you both owe each other a pint, as you're both wrong. What happened was that a super-hot German team created Denaris, but it was so similar to R-Type that US Gold (who had just bought the R-Type licence) stopped its release.

However, the Denaris team were then recruited to handle the official Amiga R-Type conversion and did a pretty blinding job of it too. So everyone was happy in the end.



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Points of View



They say "tis the season to be jolly" and all that, but here at CU Amiga we still take time-out from the festivities to deliver you some serious rhetoric... Bah humbug!!

Required: one reality check, good condition



Every day we get letters sent to us from enthusiastic readers who have all manner of ideas, plots and schemes to get the Amiga back on track. The trouble is, many of them are not grounded in reality. Here at CU Amiga we're privileged to be able to survey the Amiga scene from a very central viewpoint. We get to hear everyone's side of the story, from the many and varied readers and Amiga users, the software and hardware developers, and those who sell and distribute the products, not to mention Amiga International and Amiga Inc themselves. Allow me then, to administer a few reality checks...

1. This is 1997, not 1987

• Personal computers are no longer the preserve of technically-minded enthusiasts.

• The world is now of the opinion that a personal computer is a Wintel PC, end of story.

Based on this, a mass market personal computer must be able to run Wintel applications if it is to succeed.

2. An alternative platform must target niche markets

• There are plenty of niche markets to tap into: video, audio, rendering, networking, publishing and more.

• The resurgence of network-based computing makes it much more practical to integrate specialist platforms into larger systems, reducing the requirement for Wintel compatibility.

"The resurgence of network-based computing makes it much more practical to integrate specialist platforms into larger systems".

3. See the bigger picture

• You and your mate do not necessarily equal or mirror the global Amiga scene.

• Current Amigas are used in a wide variety of diverse applications by a similarly wide variety of users: kid with A500 playing Champ Manager, TV studio in the USA, local club secretary making newsletters, cash-strapped musician, independent graphic design company, Internet fanatic, game/application/demo programmer, all round computer enthusiast... the list goes on for ever.

The point of this is not to come across in a "we know best" kind of tone. It's to settle a few misconceptions that seem to crop up time and time again. As I think Petro once said, the biggest asset the Amiga has is its users. Such a motivated and loyal band have been and could prove to be a very powerful force in determining the Amiga's future. No two people are ever going to have exactly the same vision and ideas, but at least with some informed knowledge of the facts we can all start to make more productive moves towards getting our favourite machine back on top.

■ **Tony Horgan is Editor of CU Amiga.**

The importance of having Petro

I had to smile while reading Backchat in the October issue. In it, a reader wants to know exactly how to pronounce "Petro Tyschtschenko" because it's hardly right to just call him Petro". But you know what? It is OK to just call him Petro.

Just in case you've missed the last three and a half years of Amiga intrigue, Petro went from head of logistics for Commodore to President of Amiga Technologies for Escom, and is now President of Amiga International for Gateway, a firm charged with global sales and marketing of Amigas.

In that time, he's taken a lot of criticism from users and former employees alike and from others in the industry. But it's still OK to just call him Petro.

Petro represents something Amiga users have wanted for so long and now that they finally have it, they're having a hard time appreciating it. Sure, it's important that Petro can go to India and open up new markets for the Amiga (it's apparently among his top countries in terms of sales these days).

But particularly since Gateway came on to the scene, Petro has made an appearance at shows and user events in most of the major Amiga-using countries of the world to talk up the Amiga and its future with Gateway's new Amiga Inc. development firm.

Some people don't think Petro is worthy of their respect. If you handed Petro a box containing an A1200, an accelerator card, a Hypercom, and a Net software bundle all disassembled, he might not be able to put it all together in front of you and get online. In that, people don't feel he's necessarily "one of us". But that's not the point of Petro.

"In many ways, Petro has been one of the only consistent things about the Amiga's recent history".

He's supposed to be a man who can deliver inspiring speeches, shake hands and chat with the users, and go out for a beer afterwords. Which is exactly what he does, time and time again. In many ways, Petro has been one of the only consistent things about the Amiga's recent history.

With his lifetime of qualifications, my guess is that if he really hated what he was doing, he could go elsewhere. Commodore and Escom make pretty good resume line items. But my guess is that he enjoys what he does – selling Amigas and coming to talk about it with users from around the world.

You don't have to love the man. It's OK if you don't even like him. But like him or not, he's the official ambassador of goodwill that Amiga users have wanted for a long time. And if he wanted to be called "Mr. Tyschtschenko", he'd go get a different job.

■ **Jason Compton is US Correspondent for CU Amiga.**

Who needs custom chipsets?



One of the standard lines you will hear when Amiga users discuss the future of Amiga hardware is that we have to move to PCI.

With a PCI slot, the range of hardware add-ons for the Amiga would be vastly greater. Any PC card (graphics, sound, i/O etc.) could be used on the Amiga with nothing more than a bit of driver software. The standard line you hear in response is that doing this is not what the Amiga is about.

The Amiga is all about custom chipsets, and not industry standard rubbish.

Missing the point

What is a custom chipset when it's not just a buzzword?

Simply put, it is a chipset which has been custom designed for a certain function. When you plug an Orchid Righteous 3DFX card into a PC, you are giving that PC a custom 3D graphics chipset. The advantage of giving the Amiga PCI slots is that the custom chipset is no longer part of the main motherboard and can be replaced as custom chipset technology improves.

Everyone and his donkey are making custom chipsets these days, so there's no way Gateway can do what Commodore did long ago and make a chipset that will remain state of the art for half a decade. What people really mean when they talk about the Amiga and the desire for a custom chipset is that they want the Amiga to be special and the custom chipset is what made it special.

We need to look to the future not the past. Rather than making a custom graphics chipset, leave that to the boys who can do it best and go for off the shelf cards with Cybergraphx. If we want the Amiga to have a flavour of its own, how about making sure that it does those multimedia things it is so famous for as cleverly as possible.

"What the Amiga really needs to adopt if it wants to jump to the head of the queue and grow cutting edge credentials again is full blown DSP technology".

Make sure there is video out, as a retargettable mode. Then we get serious. Let's have built in sound and video streaming, MPEG decoding, built in high speed comms, audio processing, the lot, all integrated into the workings of the machine. Sounds good? Yep. Sounds expensive? Not any more.

What the Amiga really needs to adopt if it wants to jump to the head of the queue and grow cutting edge credentials again is full blown DSP technology. Something like the Philips Trimedia DSP/co-processor. This chip is specially designed for PCI buses.

Linking it to a PCI bridged Amiga would be simple, and give the Amiga enormous multimedia power. A chip like this is custom designed to do the jobs that your CPU doesn't like to do.

An Amiga with this or a similar chip as a standard part (hopefully on an upgradeable daughterboard) would be able to earn the tag of the ultimate multimedia machine.

The chipset is going to be available as a PCI card for other computers, but it is the surety of having it ship in every single Amiga that would put the Amiga up there in pole position as far as the multimedia developers are concerned.

The Amiga does need some updating and it needs components bought off the shelf, but equally it should not lose out on the unique strengths that make it the Amiga.

More info on the Philips Trimedia chip can be found at http://www.trimedia.philips.com.

■ **Andrew Korn is the Staff Writer for CU Amiga.**

"Adios... CU (later) Amigos"



When a staff member of CU Amiga leaves, we get a barrage of mail demanding to know why, where that person has gone and what will happen next. This is understandable. Working on CU Amiga is the dream for many so it's difficult to understand why someone would want to leave. Is Amiga going belly up? Is the magazine going to close and so on.

My departure has been known on the Net ahead of you reading this. Accordingly I've had all of the questions already. I even wrote a FAQ on the subject and put it on my web page at http://www.matsnet.u-net.com. The gist of this: the Amiga is not going belly up, its future is looking brighter than ever. Next, CU Amiga Magazine remains profitable and viable for ourselves, our advertisers and for our tens of thousands of readers worldwide.

It will be around for a long while yet. I don't know who's replacing me yet, maybe you. So why am I going? In short, to pursue my career. After two and a half years at CU Amiga, it's time to move on and do other things. My time at CU has been brilliant for me and some fantastic things have happened during this era. The 68060 came out, so did 64-bit graphics. There were blinding games like Worms and XTR, the company was bought and sold a few times and there were the fantastic World of Amiga shows.

The CD-ROM revolution took off as CD-ROMs went from a tiny minority to over 50% of active Amiga users. Comms and the Net also changed from a tiny minority to a mainstream activity much to my delight. It's been a marvellous time indeed and while our readership has declined, those who remain are increasingly switched on. You guys are much more likely to have CD-ROMs, accelerators, big-box Amigas and Net connections than before.

"I'm looking forward to using an Amiga at home as my hobby once again. So you'll still see my by-lines at the articles in CU Amiga but obviously not as often".

You are also more likely to know the Amiga intricately. It's been highly challenging to cater for your needs and dream up new ways to inform and entertain as time moved on. Who would have foreseen CD-ROM coverdisks and even a cover-mounted PCB two years ago?

I'm looking forward to using an Amiga at home as my hobby once again. So you'll still see my by-lines on the articles in CU Amiga but obviously not as often as before. I'm afraid I can't say where I'm going due to my contract. I *can* say that it's an American publisher with a UK office. My heartfelt thanks to you who made this dream job possible for me. Thank you for your E-mails and letters and I hope to see many of you around on the Net for a long time to come.

It's an exciting time for the Amiga and hopefully the beginning of the great revival. Those of us that have worked with and enjoyed the Amiga will retain the last laugh.

Hopefully the CU team will let me get on my soap box occasionally too, I wouldn't miss that for the world.

■ **Mat Bettinson, Technical Editor for CU Amiga.**

AMIGA MAGAZINE

READER SURVEY

In order to give you the best magazine possible we'd like to find out more about you. That's what this survey is for. We've kept it just about as brief as possible so you won't spend all day filling it in. All the questions here are carefully chosen to allow us to give you the best service we can. You'll be spared the usual questions about your favourite chocolate bar and how many pets you have. As an incentive we're offering a phase 5 PowerUP card for one lucky entrant picked at random from the returns.

Buyers of floppy edition:

Do you have a CD drive?
☐ yes ☐ no

Do you intend to buy soon?
☐ yes ☐ no

How important are the cover disks?
☐ not ☐ fairly ☐ essential

How many editions of CU Amiga have you bought in 1997?
disk ....
CD ....

How interested are you in the following types of cover disk (0= not interested, 10=very interested)?
Commercial game demos ....
Shareware games ....
Commercial applications ....
Shareware utilities ....

What would persuade you to move to CD-ROM?
....
....

Buyers of CD edition:

Do you have a CD drive?
☑ yes ☐ no

How important are the cover CDs?
☐ not ☐ fairly ☑ essential

How many editions of CU Amiga have you bought in 1997?
disk ....
CD ... 12 ....

How interested are you in the following types of cover disk (0= not interested, 10=very interested)?
Commercial game demos ... 8
Shareware games ... 7
Commercial applications ... 7
Shareware utilities ... 7
Utility collections ... 6
Demos/mods/pictures ... 10

Any comments to make on the cover CDs?
....
....

All:

In the last year have you missed issues of CU Amiga because you couldn't find it (if yes please state your location)?
☐ yes ☑ no

How much do you intend to spend on your Amiga in the next 12 months?
☐ £0-£30 ☐ £30-£100
☐ £100-£300 ☑ £300+

Which of the following do you intend to buy in the next 12 months?
☑ software applications
☑ hardware add-ons
☐ new Amiga/Amiga clone

Do you intend selling/ditching your Amiga in the next 12 months?
☐ yes ☑ no

Your Amiga:
Tell us about your Amiga.

Model
☐ A500/A500+ ☐ A600 ☐ A1000 ☑ A1200 ☐ A1200T ☐ A1500 ☐ A2000 ☐ A3000/3000T ☐ A4000/4000T ☐ CD32 ☐ CDTV

Total RAM
☐ 1Mb ☐ 2Mb ☐ 4Mb ☐ 6Mb ☐ 8Mb ☑ 16Mb+

Operating system/Workbench
☐ 1.x ☐ 2.x ☑ 3.x

Additional peripherals
☑ CD drive ☑ hard drive ☑ printer ☑ SCSI interface ☐ modem ☑ monitor ☐ Zorro slots ☐ graphics card

Mark three of the following activities that interest you most.
☐ 2D graphics
☐ 3D graphics
☑ Games
☑ DTP/Word processing
☑ Making music
☐ Internet
☐ Programming
☐ Business
☐ Animation
☐ Presentations/video
☐ Scientific

Do you ever use your Amiga professionally?
☐ yes ☑ no

What three things would you most like to see in a new Amiga?
☐ PCI Bus ☐ AGP Bus
☑ Upgraded Workbench
☐ Multichannel 16/24-bit audio
☐ Memory protection
☑ 3D graphics as standard
☐ Networking
☐ Internet tools
☐ Fast comms port
☑ New CPU
☐ Retargetable graphics
☐ Genlocking
☐ Video output
☐ Printer/scanner support
☐ Backward compatibility
☐ Digital signal processor
☐ JAVA
Other ....

What were the two best two things in CU Amiga in the last year?
....
....

What were the two worst things in CU Amiga in the last year?
....
....

Win a PowerUP card

We're offering a fabulous phase 5 PowerUP accelerator as an incentive for you to get your surveys to us. The PowerUP range includes cards for the A1200, A1500/2000 and A3000/4000. Even if you've got an A500 or A600 this is a coveted prize well worth winning. The closing date for the PowerUP draw is 1st January 1998.

Send your completed survey (or a photocopy, but no multiple entries) to:
CU Amiga Survey
37-39 Millharbour, Isle of Dogs
London E14 9TZ

Alternatively fax it to: 0171 972 6755

Your name: ....

Your address: ....
....



Occasionally we would like to send you information in other related services or promotions and offers. If you do not wish to recieve this information please tick the relevant boxes:
☐ From CU Amiga ☐ From third parties (other carefully screened companies